The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

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OUR GOLD SUPPLY—ITS EFFECTS ON FINANCE, TRADE, COMMERCE, AND INDUSTRIES—No. II.

By THOMAS CORNISH, Mining Engineer (late of Australia).
Author of "Gold Mining, its Results and its Requirements."

The uses to which gold is applied for practical manufacturing and ornamental purposes are so numerous and well known that it is unnecessary to attempt to describe them, suffice it to say that a very large proportion of the gold raised is manufactured in articles of use and ornament, which, if necessary, in time of monetary difficulties can be readily converted into the standard coin of the country in which it is in use or required. Gold, unlike most other mineral productions, does not corrode, waste, become injured, or material depreciate in value like other articles of vertu; it may be worn as ornaments or used as plate or other purposes, and when required can be converted into coin for financial purposes. Although any given quantity of gold may be manufactured into articles of use or ornament, and its intrinsic value become enhanced by the labour spent on it, the enhanced value may become lost by the result of accident, but its intrinsic value as gold for coinage remains unaltered. To illustrate my argument as to special value of gold, and the means by which its possessor can utilise it more readily than other articles of supposed equal value, as I have before stated, I will here instance a case in point. Supposing a pound weight of gold value (say) nearly 50*l.*, or which will coin (say) 50 sovereigns, be made into some ornament, and its value by the labour spent on it be raised to 100*l.*, then take any other article of use or ornament of a distructable nature, such as a vase, piece of furniture, or picture, of a similar value of 100*l.*, and in an accident by fire or a smash the two articles of supposed equal value become burnt or broken the loss of the vase, piece of furniture, or picture, would be 100*l.*, while the loss of the gold ornament would be only 50*l.*, as neither fire or damage by smashing will decrease the weight or intrinsic value of the gold that is still worth 50*l.*, or will coin into as many sovereigns, or as a further example, say a miner produces a pound weight of new gold from the earth and immediately invests that amount in some article of luxury, if afterwards he required to realise on the investment he would in all probability have to submit to a considerable loss on the sale of the article; but the possessor of the gold can re-invest the ready cash more advantageously in extending his business operations than he could by purchasing goods on credit; thus the gold passes from one to the other, from the miner to the retail trader, thence to the wholesale merchant, thence to the manufacturer, thence probably to the banks, from which concentrated point its influence radiates, and credit or paper money is issued for the accommodation and convenience of customers of such monetary institutions.

As the production of gold has such an immediate influence on the prosperity of the countries in which it is produced as also a more remote but equally direct influence on the welfare of the countries in which it becomes absorbed, it is a matter of the highest importance that the subject should receive the most careful consideration, and any practical suggestions that may be offered that will afford the means of permanently increasing the supply should receive the attention of all interested in its results. England has become the great concentrator of the gold raised by the miners in Australia. As the chief emporium of trade, commerce, and manufactures she has received and disbursed as also substantially benefitted by the production of the vast new wealth which has been poured into her lap chiefly by the enterprise of a small number of her sturdy sons, whose undaunted energy has in the last 30 years opened up mineral, agricultural, and pastoral resources of almost unlimited dimensions.

The most practical evidence of the effect of the production of gold, and the pecuniary benefits conferred upon civilised nations by its dissemination throughout the various channels of trade and commerce, is by the enormous financial transactions that have taken place during the last few years. France paid a war indemnity of 200,000,000*l.* to Germany after the late war; America in a few years has nearly paid off the huge debt contracted during the Civil War; while Turkey has also been mulcted in a very heavy indemnity. Previous to the gold discoveries it would have been impossible for any nation to have paid in bullion 200,000,000*l.* as a war indemnity. Some few years ago in the Australian colonies, while discussing the subject of our gold supply in the Press, the question was asked as to what had become of all the gold raised, as the colony of Victoria had so little to show for the 200,000,000*l.* that had been produced within its territory? I gave a reply through the Ballarat Courier as to what had become of a very large proportion of it. From a statement in the Money Market Review (1879) it was shown that English financiers had advanced by loans to the several bankrupt States of Europe and South America upwards of 600,000,000*l.* in 25 years, and at that time the market quotations of the stock gave it a value of a little over 60,000,000*l.*, so that in a quarter of a century there had been a depreciation or loss of over 500,000,000*l.* These loans had been to Turkey, Spain, Greece, Egypt, Mexico, Granada, Venezuela, Iquique, Honduras, Peru, Chili, Paraguay, Uruguay, and other places. Lord Derby in a public speech about that time stated that the loss of British capital advanced to defaulting States had been over 300,000,000*l.* Although a considerable amount of the money loaned to these countries might have been re-invested in English goods there can be little doubt that by far the greatest portion of the bullion sent to these countries has become absorbed amongst the population, and the Governments in most cases are unable to pay the interest or principal.

The enormous quantity of bullion produced by the gold miners since the discoveries in 1848 and 1851, amounting to probably nearly 1,000,000,000*l.* sterling, has for the most part gravitated to England, thereby enabling financiers to carry on a most reckless system of money lending to States and nations; the most of them, if not absolutely bankrupt, are unable to meet their engagements. Nearly one-half the new working capital of gold furnished to and distributed throughout the world by the gold mining population has been unfortunately sunk in these bankrupt States of Europe and South America; this, and the falling off in the yield of gold, has been no doubt some of the primary causes of the great depression lately existing in England, and the collapse in several monetary institutions; it is also a solution of what became of a large portion of the gold raised during the gold era, the balance being distributed throughout the world as coin and manufactured articles of value.

Had the financiers and capitalists of England devoted a tithe of that vast sum so irretrievably lost to bankrupt foreign States to the practical development of the gold mining resources of the Australian colonies they would not only have materially aided the legitimate development of mining, increased the supply of gold or new purchasing power, and fostered other industries and forms of wealth incidental thereto, but would in all probability have been amply rewarded for the outlay.

The value of our gold supply has occasionally received attention at the hands of some writers on finance and political economy, but it is somewhat surprising that a subject of such vast importance to the general progress of the world has not been more fully dealt with. The remarks of a well-known writer on political economy may not be out of place to record.

Professor Cairns, in his "Essays on the Gold Question," quoting from the Economist of June 29, Aug. 3 and 31, 1872, says:—The total estimated stock of gold in the world was 560,000,000*l.* As for the annual production it had varied considerably since the beginning of the century. In 1800 it was, according to best estimates, rather over 300,000*l.* But at a later period important discoveries of gold were made in Asiatic Russia, and for the five or six years ending 1848 the annual produce would seem to have varied from 5,000,000*l.* to 8,000,000*l.*

Such was the state of things immediately preceding 1848. In that year the Californian discoveries took place, and these were followed by the Australian discoveries in 1851. For those three years the annual production is set down by the Economist at 9,000,000*l.*, and from this date the production suddenly rose to, for 1852, 27,000,000*l.*, and continued to rise to 1856, when it attained its maximum of 32,000,000*l.* At this stage a decline in the returns occurred, the lowest point reached being in 1860, when they fell to 18,683,000*l.*, but from this they rose again, and for the last ten years have maintained an average of about 20,500,000*l.*, the return for the year 1871 being 20,811,000*l.*

The total amount of gold added to the world's wealth by this 20 years production has been about 500,000,000*l.*, an amount nearly equal to that existing in the world at the date of the discoveries, in other words, the stock of gold has been nearly doubled since that time. The following countries have permanently absorbed the gold flowing through the channels of commerce (says the Economist, 1872):—Retained in England, 68,000,000*l.*; in Europe, chiefly France, 105,000,000*l.*; Portugal, and other places, 12,000,000*l.*; South America, 8,000,000*l.*; India and the East, 90,000,000*l.*; Australia, 26,000,000*l.*

The above statistics, as given by Prof. Cairns, quoting from the Economist, only accounts for 309,000,000*l.*, leaving nearly 200,000,000*l.* to be accounted for, which no doubt can be fully explained by the gold retained in North America and Canada, and the large amount of bullion loaned to foreign states, or held privately.

The estimates I have been able to gather from California and other States of America, British Columbia, Victoria, New South Wales, Queensland, and New Zealand would give a total production of gold and silver for the 30 years, from 1849 to 1879, of a grand total of about 900,000,000*l.* There can be little doubt but that this unparalleled production of new wealth by the gold and silver mines has been the primary cause of the rapid progress of events, the enormous increased wealth and prosperity of many civilised nations; and, in consequence of this general advancement of wealth, intelligence, trade, commerce, and finance, it has become an absolute necessity that the annual production of gold should not only maintain its present standard, but that the supply of new gold should increase annually in the same ratio as trade, commerce, and population.

As every newly established banking institution requires to be the holders of gold proportionate to the credit paper issued, it stands to reason that, unless the supply of new gold be maintained, trade, commerce, and financial operations must be curtailed, which means general depression and a proportionate decrease in the value of all kinds of properties and labour. Civilised society having, during the past quarter century, been indulged in a sudden increase of wealth and prosperity by the production of gold, and tasted the pleasures and luxuries of life derived from this unparalleled increase of new purchasing power, would not be content to forego, limit, or give up the acquired taste for new and pleasant luxuries which it would have to do if the production of gold materially decreased.

Gold mining must therefore be considered one of the most important industries of the world, and one to which there should be more intelligent consideration given than has hitherto been done. A gentleman writing in the Contemporary Review for April, 1879, remarks as follows:—

"BAD TRADE AND ITS CAUSES (by Stephen Williamson, Liverpool; of Messrs. Balfour, Williamson, and Co.)—It will not be questioned that the large increase of the world's money, due to the Australian and Californian gold discoveries, led to a great extension of the world's commerce. The interchange of commodities was marvellously stimulated, labour had for many years a greatly augmented recompense, the material comfort and welfare of mankind were greatly promoted, real and personal property increased enormously in value all over the civilised world, the foreign commerce of England alone rose from 250,000,000*l.* in 1852 to 650,000,000*l.* in 1875, the foreign commerce of many other nations rose in like proportion."

THE MENDOCINO (CALIFORNIA) MINING DISTRICT.

An abundant supply of water being essential to the success of mining, and especially of gold mining, in California, flume companies are usually attractive to capitalists, and when flume and mining operations are combined the result is usually highly satisfactory. Some ten months since the Mendocino Flume and Mining Company was incorporated with a capital of $1,000,000, in shares of $10 each, to construct and maintain a lumber and mining flume, to carry on the business of manufacturing lumber, to operate its gold gravel mines, and to sell water to mines adjacent to route of flume. The scene of the company's operations is the Calpella district, Mendocino county, California, and the concern is almost exclusively under the control of Boston capitalists. Early in the spring a corps of engineers and surveyors took the field, and surveyed the route for the flume from a point on Mill Creek, near Leonard's Lake, to the town of Calpella, a distance of about 12 miles. This work occupied nearly two months, and Mr. William T. Riley, superintendent of the company, in the meantime carefully examined and (May 9) reported that he was satisfied that the general route of the survey could not have been better selected. For a very large portion of the distance the flume will require simply a foundation on the ground, and not more than, in the aggregate, a mile of trestle-work will be required for short distances, and over comparatively shallow ravines and depressions, and only in two instances will trestle-work of any special magnitude be required—in one case 130 and in the other 90 ft. high—and perhaps two short tunnels of 250 or 300 ft. each: so that, as a whole, it is as favourable a route as would be possible to ask for in a lumber country. With very little trouble and expense a dry chute may be constructed from the Smith tract to the line of the flume, and thus open up as fine a body of virgin timber forest as there is in California; and every year will add to its value, as the redwood timber is fast disappearing throughout the State, and its value over pine will be more and more appreciated as the redwood becomes scarcer and more difficult to obtain. The trees on the company's tract are really a picture to look at, ranging, as they do, from 5 to 9 or 10 ft. in diameter, and 200 or more feet high, without a branch for 100 ft., and as clean as a Doric column.

Leonard's Lake, which is the property of the company, comprises an area of nearly 60 acres, having an average depth of 92 ft. It is perfectly landlocked, with only a subterranean outlet some 200 or 300 rods down the mountain, and so forming the source of Mill Creek. It is a wondrously beautiful place, and as a water supply, if near to San Francisco, would be worth one million of dollars. It fills what once might have been the crater of a volcano. It is on the very top of one of the highest ridges, and is surrounded by a rim of heavy timber 100 acres in extent, also the property of the company. The engineer measured one tree, near the margin of the lake, which showed 47 ft. in circumference. There will be no difficulty in obtaining a reserve supply of water from the lake, as it will only be necessary to sink down the proper distance some 15 or 20 ft. from the margin of the lake, put in a substantial head-gate, let the water to it, open it, and the water will do the work between there and Mill Creek in the way of cutting a channel. The company's engineer measured the water flowing through Mill Creek, and found there "225 miners' inches," under pressure of a 4-inch head (the usual gauge), and ascertained, from reliable authority, that the amount would be maintained for nearly the entire season.

The flume will be V-shaped, and is now rapidly pushing forward to completion under the superintendence of Mr. W. H. Bellows, the engineer who constructed the famous flume of the Miocene Company, in Butte County, California. The name of this gentleman is sufficient guarantee that the work will be thoroughly and faithfully executed. The right of way for its entire length has been deeded to the company. The lower terminus of the flume will be located at the lower end of the Calpella tract, on a plateau between Gold Gulch and a ravine north of it, in immediate proximity to the country road, the ravine affording all facilities for disposing of the waste water. The Smith tract, which the company has purchased; this is covered with a dense growth of Oregon and pine redwood. There are also many rare and valuable woods, such as oak, alder, and mountain mahogany. The tract comprises 454 acres. The company will erect a sawmill here. The company has also purchased an adjoining timber tract of 160 acres. Reeves's tract, of which the company has just concluded the purchase, contains 1103 acres of the finest timber. The character of the timber in the district may be judged of by the fact that a writer of authority states that "one tree in Mendocino, whose remains were shown to me, made a mile of railroad ties. A schooner was filled with shingles made from a single tree. Trees 14 ft. in diameter have been frequently found and cut down; the saw-logs are often split apart with wedges, because the entire mass is too large to float in the narrow and shallow streams, and I have seem them blow a log apart with gunpowder. A tree 4 ft. in diameter is called undersized in these woods. I was told that an average tree would turn out about 15,000 ft. of lumber, and thus even 30 such trees to the acre would yield nearly 500,000 ft. Mr. William H. Bellows, who has carefully examined the timber lands belonging to the Mendocino Flume and Mining Company, says—"The company possesses a tract of land that will yield, I estimate, more than 150,000,000 ft. of merchantable lumber, which, if sold (as it would be readily), at the low average price of $20 per 1000, would yield a total return of over $3,000,000. Deduct from that the cost of cutting, manufacture, and delivery at Calpella (say), $6 per 1000, will leave over $2,000,000 for dividends, and at an average cutting and sale of 10,000,000 ft. per year, would require between 15 and 16 years."

The mines of the company comprise 300 acres of valuable placer claims, which it will be able to work most successfully as soon as its mining flume is completed. Prof. J. Kellogg, of San Francisco, who is thoroughly familiar with the property, says: "Hardly a pan of gravel can be taken up in hundreds of acres at Calpella that has not the colour in it. In the surrounding hills is the bed of an ancient river, covered 60 ft. deep with gravel, which will yield abundantly to scientific mining when water is brought to work it. The Calpella gold placers have been profitably worked in ravines and gulches for 20—perhaps 25—years during the rainy season, paying in many places from $5 to $10 per day to the hand. The ground is especially suitable for hydraulic mining." Mr. William T. Reilly, Assayer at the United States Mint of San Francisco, and who had practical experience in placer mines from 1849 to 1861, writes of this section as follows: "On the ground owned by the Mendocino Flume and Mining Company mining has been done at times during tha rainy season for the last 20 years, and nothing but the lack of water has prevented most successrul mining operations from being carried on there. The gravel is eminently calculated for free working, as it, as far as can be ascertained, is entirely free from pipe-clay, that bane of gravel mines. The ground, as indicated by positive and certain data, is an old river bed, and I should expect, under an intelligent management, excellent results generally, and from considerable portions of it, towards the bottom or bed-rock, very rich returns." The enterprise, moreover, is indorsed by the leading citizens of the county of Mendocino, who, in a letter to the company, say: "It is entirely practicable, and is what we need for the cheap and rapid transportation of lumber, and for the development of our rich gravel mines. Such an enterprise, carefully managed, must prove a paying investment to all parties interested."

Registration of New Companies.

The following joint stock ompanies have been duly registered:—

THE FREEHOLD LAND SYNDICATE (Limited).—Capital 10,000*l.*, in shares of 100*l.* To buy, sell, and deal in land, erect, let, and sell dwellings, buildings, &c. The subscribers are—A. W. Hewer, 28, Golden-square, 1; J. W. Smith, St. Mary's Chamber, 2; J. E. Walker, 3, Chancery-lane, 1; M. M. Samuel, 14 and 15, Cow Cross-street, 3; W. H. Fergusson, 14, Bell Yard, 2; W. Potter, jun., 109, Aldersgate, 3; W. Bradley, 37, Hilldrop-crescent, 2.

WM. HADWEN AND COMPANY (Limited).—Capital 12,000*l.*, in shares of 20*l.* To acquire a going concern at Manchester, and continue the business of manufacturers of frillings, baby linen, underclothing, and cardboard box makers. The subscribers (who take one share each) are—W. Hadwen, Manchester; J. MacCullum, Manchester; W. Webster, Manchester; C. Crowther, Manchester; C. Ruskill, Manchester; J. J. Broadbridge, Manchester; F. H. Beer, Brixton.

THE PADSTOW AND MID-CORNWALL JUNCTION RAILWAY COMPANY (Limited).—Capital 1500*l.*, in shares of 10*l.* To make, work, and maintain a railway from Padstow, Cornwall, to St. Denis Junction, on the Cornwall Mineral Railway, in the parish of St. Columb Major, and such other railways in Cornwall as may be determined on. The subscribers (who take one share each) are—H. F. Whitefield, St. Columb; C. Rawle, Padstow; J. Reynolds, Padstow; C. Hawk, Great Columb; A. Endean, 85, Gracechurch-street; D. Cock, Roche; J. Hicks, Padstow.

THE PATTERSYKE AND CLARGILL HEAD MINING COMPANY (Limited).—Capital 6400*l.*, in shares of 1*l.* To purchase or otherwise acquire mines or deposits of lead ore, barytes, and other minerals, mining grounds, lands, and hereditaments in Cumberland or elsewhere, or rights concerning same; and to search for, get, work, raise, smelt, manufacture, sell or dispose of and deal in land, lead ore, barytes, &c. To acquire, upon terms of an agreement, the business, property, and liabilities of the Pattersyke Mining Company (Limited), now being voluntarily wound up. The subscribers (who take one share each) are—W. Kershaw, Newcastle-on-Tyne, merchant; J. Bell, Newcastle-on-Tyne, shipowner; S. Dunn, Newcastle-on-Tyne, shipowner; D. H. Goddard, Chester-le-Street, Esq.; T. C. Bell, Newcastle-on-Tyne, merchant; W. Pritchard, Newcastle-on-Tyne, merchant; J. R. Young, Newcastle-on-Tyne, merchant. No Articles of Association have been registered.

THE IDAHO GOLD MINING COMPANY (Limited).—Capital 150,000*l.* in shares of 5*l.* To acquire certain mines, properties, and estates belonging to J. W. Birdseye and others, situate in Idaho territory, United States, or other estates of any tenure in the same or other districts. To carry on all the business connected with gold mining, and also that of cultivators, makers, and dealers in the produce of the cultivation of the company's lands and property. To acquire or construct all works, buildings, plant, machinery, &c., necessary for the company's operations. The subscribers (who take one share each) are—J. Wild, 8, Fowkes' Buildings, esquire; P. Carnegy, Upper Norwood, no occupation; H. W. Dent, West Kensington, barrister; R. T. Lattey, 16, Devonshire-square, solicitor; C. B. Woodford, 85, Gracechurch-street, secretary; F. C. Windsor, Leyton, clerk; P. Hart, 16, Devonshire-square, solicitor. The first directors are Messrs. Carnegy, Dent, Wild, and B. T. Montgomery. The number must not exceed five or be less than three, and the qualification is fixed at 250*l.*

THE TOWN LAUNDRIES (Limited).—Capital 25,000*l.*, in shares of 1*l.* To establish and carry on a steam laundry, bleaching and cleaning business, in London and elsewhere. The subscribers (who take one share each) are—H. Tarry, 4, Bond-street; R. Muir, 30, Finsbury Pavement; H. Barton, 2, New Broad-street; F. Lane, Holloway; A. Gibbs, Holloway; C. Voigt, 13, Union-court; J. L. Ashburne, 114, New Church-road; A. Douglas, 61, Walford-road.

STEAMSHIP DRYBURG ABBEY (Limited).—Capital 35,840*l.*, in in shares of 140*l.* To carry on a shipowners' business in all branches. The subscribers (who take one share each) are—W. Wood, Rockferry; R. P. Wood, Rockferry; T. Fairgrim, Galashields; J. Blount, Dumfries; R. Cookson, Liverpool; H. W. Hammond, Liverpool; E. Mounsey, Liverpool.

THE FIRST MUTUAL CO-OPERATIVE FARMING ASSOCIATION (Limited).—Capital 25,000*l.*, in shares of 1*l.* To carry on the business of farmers, improvers, cultivators, reclaimers, owners, &c. The subscribers (who take one share each) are—T. Whiffin, Lee; E. Par Lee; F. Y. Viney, Lewisham; H. Buckland. Lee; J. S. Smith, Lewisham; C. Windust, Lewisham; T. F. Dixon, Brownhill.

PICKERING, PHIPPS, AND COMPANY (Northampton and Towcester Breweries), becomes incorporated under the Limited Liabilities Acts; also the MIDLAND WAGON COMPANY.

THE ALDERSHOT AND FARNBOROUGH TRAMWAYS COMPANY (Limited).—Capital, 20,000*l.* in shares of 1*l.* To construct, lay down, work, and maintain tramways in Aldershot and neighbourhood. The subscribers (who take one share each) are—T. Ford, 62, Coleman-street; W. W Batt, 27, Mincing-lane; C. J. Chubb, Clifton; H. Jackson, Surbiton; E. M. Chubb, 11, Pancras-lane; J. D H. Bigwood, Putney; T. D. Pettiver, College-street.

THE MONTE-MORA MINING COMPANY (Limited).—Capital, 25,000*l.*, in shares of 10*l.* To carry into effect an agreement made for the purchase, from C. S. Nicol, of the lease granted by the Portuguese Government of a mineral property known as Costa Perriera, situate in the district of Alcacer do Sal, and all rights connected therewith, for the purpose of carrying out in all details the business of mining. To establish and regulate agencies in various parts of Portugal. The subscribers (who take one share each) are—A. A. G. Forbes, Crossdovey, clerk; S. T. Tregaskin, St. John's, clerk; H. Richards,

Wandsworth, accountant; C. Quintin, 146, Queen Victoria-street, secretary; A. Rickard, Swansea, M.E.; E. E. Hall, Shepherd's Bush, clerk; C. S. C. Watkins, Carshalton, accountant. The directors will be appointed at the first general meeting, until then the subscribers will act as such.

GREAT CONSOLIDATED MINING COMPANY (Limited).—Capital 200,000*l.*, in shares of 4*l.* To acquire by purchase or otherwise and work mines in Spain, and in particular the different properties known as El Auriferor del Rio Sorbe, La Esperanza, La Margen Aurifero del Rio Sorbe, also those copper and mineral properties, San Jaime and San Joge. The whole situate in the district of La Nava de Jadraque, province of Guadalajara. To work said mines, or any others that may come into the possession of the company. The subscribers (who take one share each) are—J. Moss, Southend, civil engineer; T. Whetstone, Pentonville, contractor; J. A. Elsob, 11, Great St. Helen's, surveyor; C. M. Elsob, 11, Great St. Helen's, secretary; C. Hart, 119, Lambeth-road, contractor; J. Hoyle, 43, Pall Mall, gentleman; D. W. Nell, Forest Hill, accountant. The subscribers will nominate the first directors, whose number must not be less than three or more than eight.

AYLESBURY HOUSE (Limited).—Capital 10,000*l.*, in shares of 1*l.* To purchase, take over, and continue a cheesemonger, butterman, dairyman, and poulterer's business at Eastbourne. The subscribers (who take one share each) are—J. H. Ellis, St. Benet-place; C. H. Scott, 58, King William-street; W. Curtis, 57, Moorgate-street; W. J. Greig, Hampstead; A. Wyatt, Chelsea; C. Corrick, 111, City-road; P. Harrison, 7, Highbury Hill.

WATSON BROTHERS' MINING CIRCULAR.

WATSON BROTHERS,

MINEOWNERS, STOCK AND SHARE DEALERS &c.

1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

Nearly twenty years ago the weekly information which had previously been published for a great number of years in WATSON BROTHERS' Mining Circular was transferred to the columns of the *Mining Journal*, with the following announcement.

In the year 1843, when mining was almost unknown to the general public attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. WATSON, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1862), "Cornish Notes" (second series, 1863), "The Progress of Mining," with Statistics of the Mining Interest, published annually in the *Mining Journal* for 21 years, &c., &c. In the Compendium, published in 1843, Mr. WATSON was the first to recommend the system of a "division of small risks in several mines, ensuring the success in the aggregate," and Messrs. WATSON BROTHERS have always a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advice in regard to mines and sharedealing than there is at present; and from the lengthened experience of Messrs. WATSON BROTHERS they are emboldened to offer, thus publicly, their best services and advice to all connected with mines and mining.

Messrs. WATSON BROTHERS are daily asked their opinion of particular mines, as well as to *recommend* mines to invest or speculate in, and they give their advice and recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so fluctuating as mining.

The great extension of mining business, the difficulty so often complained of by country shareholders in getting accurate and disinterested information as to the state of Cornish and Foreign Mines, and of the financial and real position of mining companies generally, have induced Messrs. WATSON BROTHERS to make their Circular now published in the *Mining Journal* more extensively known, and to state—

That they issue daily to clients and others who apply for it a Price List (as supplied to most of the London and country papers), giving the closing prices of Mining Shares up to Four o'clock.

They also buy and sell shares for immediate cash, for the usual fortnightly settlement in all Mines dealt in on the Mining and Stock Exchanges, at the close market prices of the day, free of all charge for commission. They deal also, on the same terms, in the Public Funds, Railways, Telegraphs, and all other Securities dealt in on the Stock Exchange.

Having agents in all the mining districts, they are constantly getting mines inspected for their own guidance, and will also obtain special reports of any particular mine for their clients, for the inspecting agent's fee of £2 2s.

Messrs. WATSON BROTHERS take this opportunity of stating that on July 1 they took into partnership Mr. H. J. DEAN, who has been for a number of years associated with the firm, and Mr. W. H. H. WATSON, who has had some years experience of practical mining and engineering in Cornwall, and is the son of the senior partner. The firm will still be called that of "Watson Brothers."

The number of weekly communications received from almost every part of the world in regard to remarks in this Circular indicate so plainly how much they are read (and, we trust, appreciated) that they will be continued by the same writer.

Indeed, while new blood is introduced to attend to the more laborious and mechanical details of the business, the old will have more time to devote to heir different departments.

We hear the Electric Telephone Company will require a very large quantity of copper wire, which may give an impetus to the copper trade.

We don't care about "painting the lily," nor to be like the artist who had to ticket his pictures "this is meant for a horse," or otherwise, as the case might be. The Cost-book pure and simple does not require a "ticket," and, therefore, we certainly consider a resolution to attach to all documents relating to a Cost-book mine the words "No Credit System" to be a mistake and a misnomer. All mines, whether Cost-book or Limited, take credit from their men. The plan originated, we believe, as a matter of security, so that anyone throwing up his work should forfeit his wages; and this system has been perpetuated. Thus it will be seen in the accounts of the mine which has adopted the motto on all its documents of "No Credit System," that the items of expenditure at a meeting held on Sept. 7 end "For four weeks ending July 23, 1881." Now, the wages of the men—and costs of the mine due on July 23—would not be paid to them until about Aug. 20, and the wages due on Aug. 20 about the end of September. To carry out, therefore, the system of "No Credit" it would be necessary to do away with an old established custom, and a custom which we confess is rather hard upon the men.

From the inspection of Polrose, to which we referred last week, we learn that at the 100, east of cross-cut, the lode is 3 ft. wide, all saving work for tin; here there is a great change for the better, and as depth is attained no doubt, our agent states, a valuable mine will be laid open. The 90 cross-cut has been driven north and cut the Polrose lode, spar, mundic, and blende, with a leader on the south wall 14 in. wide, composed of yellow copper, with mundic, blende, and tin, the best lode he ever saw in the mine, and he strongly recommends more men should be put here at once to open it out as fast as possible, as the chances are something very good and lasting may be laid open. Another important point in the mine is cutting the Orchard lode, which was so very productive in the adjoining mine—Palladras; and he sees no reason why it should not be equally productive when cut in Polrose, as it is in ground congenial for mineral. Now, in the 90 cross-cut south, he points out that there may be only 7 fms. further to drive to cut the Orchard lode.

The Pink lode, which runs through East Blue Hills, has been one of the rich and very productive lodes of the district, and our agent, who has also inspected this mine, strongly recommends six more men being put into a cross-cut towards it in the deep adit at East Blue Hills, which would intersect it 50 fms. deep; also six men on the Baldue lode at the deep adit. This lode is 4 ft. wide, yielding tin 39 lbs. to the ton, and is worth 8*l.* per fathom. A winze is going down from the 30 to the 40 worth 8*l.* per fathom, and will open out good stoping ground. The mine will be worked dry to the 50, and by opening it out expeditiously our agent thinks a valuable property will be found.

It appears from the agent's report of Prince of Wales that the 90 east has not been driven upon the main lode, as 3 fathoms behind the present end there was a bend or turn in the lode; and in putting men to open upon it the lode has just been found, producing good stones of rich copper ore.

West Frances is looking better on the flat lode at the 154 fm. level.

At Parys' Copper there are now three points of importance in the mine and yielding 5¼ tons per fathom. The 90 west on No. 1, 90 on No. 2 (worth 3 tons per fathom and improving), and the Carrig-y-dol lode. In any other times these points would have sent shares up to 1*l.* 10s., but owing to circumstances (not in any way connected with the mine or its prospects), a large lot of shares had to be sold; and we have bought and cleared the market of more than 1200 shares the last two accounts. Very few if any are now offering.

Try the three "P.'s"—Prince of Wales, Polrose, and Parys. We never guarantee anything, but all are likely to rise in a few weeks.

The cost of an independent inspection of a mine is 2*l.* 2s. and expenses. We can arrange if our correspondent will say when and where.

We cannot answer our Glasgow correspondent.

Since the first of this month nine Cornish mines managed on *the Cost-book System* have advanced in market value (and freely saleable) over 150,000*l.*

We are not particularly fond of calls; and we should not carry on, as we do, close upon 1000 shares in Polrose if we did not fully expect something good, and a great rise ere long. As we have often explained, the mine is well supplied with all kinds of machinery, erected at great cost; and all we want is sufficient mineral, and for this our correspondent must have a little more patience.

BRATSBERG.—We will endeavour to reply next week.

Another correspondent asks if we can give him particulars, and the financial position, of Mid-Devon.

Those in the district, and practical men, consider that Sortridge will make a rich tin mine very shortly.

There have been so many disappointments at Glenroy that we do not like to say too much at present about the discovery in the 25 fathom level stope; but it must not be lost sight of that the lode, now worth 1 ton of lead and 1 ton of blende per fathom, is going north in whole ground. It may lead, therefore, to something good.

MARKET ECHOES AND MINING MATTERS

The anticipated revival in the metal markets has now become a fact. As generally expected tin has been the most buoyant: during the week it has steadily advanced. It need scarcely be said that there has been a heavy demand for tin shares—little interrupted, generally speaking, by the fortnightly settlement—or that prices have been materially strengthened. Dolcoath—this is the richest tin mine in the world—have advanced 7*l.* 10s. per share, and seem very likely to reach 100*l.* before many weeks are over. This grand old mine, which is over 400 fms. deep from surface, is richer than ever in its bottom levels; indeed, we hear that one of the points in working there is valued at about 300*l.* per fathom. Cook's Kitchen shares, which are now taking a very prominent position in the market, have further advanced 5*l.* per share. The quotation is about 25 and for Dolcoath about 87½. Twelve months ago Dolcoath shares could have been purchased for 50*l.* and Cook's Kitchens at 10*l.* And yet some persons say there is no good to be found in Cost-book mines!

A very promising bal is, we hear, to be re-worked as a copper mine. Camborne Vean—the mine in question—was extremely rich, and, like all Cornish copper mines, at a certain depth the copper gave way to tin. The mine never received, we believe, any energetic working as a tin mine. It has now, however, been taken up by some local capitalists, with whom will be associated some members of the London market; and it is, we hope, about to receive the vigorous development it so thoroughly deserves. Its situation is unequalled. It possesses the famous Dolcoath lode, and is within about 80 fms. of that mine, the only intervening sett being Stray Park, now worked by the Dolcoath adventurers. The shares of Camborne Vean are likely, therefore, to reach a good price before long. It is seldom such an opportunity offers for securing shares whilst they are still cheap in a mine situated like this one—that is, in the very heart of the most renowned tin district in the world.

Killifreth shares have remained at about 2*l.*, notwithstanding that by an accident to the pumping machinery the water has risen over the rich discovery in the shaft. The accident, however, will be very temporary in character, as the discovery is at a very shallow depth—the 20 fm. level (new shaft)—if indeed by this time the water has not been pumped out. The cutting of such a fine lode (valued at 100*l.* per fathom) is regarded as of great importance, for the new shaft is in very congenial ground, a circumstance favourable for permanently productive lodes. The western or old part of the mine is not now worked. The new shaft is about 200 fms. distant from the old one, therefore the adventurers possess really a new mine. Should the improvement hold on well, the shares must rise considerably, as such a discovery as that now made is very inadequately represented by a market value of only 2*l.* per share—12,000*l.* for the mine.

West Kitty and its satellites have not been in such good demand this week; but so far as West Kitty is concerned the dulness is probably only temporary. The fortnightly account has to a marked extent interfered with this particular group, but next week we may, perhaps, see West Kitty shares resume their buoyancy. Amongst the minor mines of this district (St. Agnes) East Blue Hills are being steadily absorbed by shrewd investors, who make it an invariable rule to buy up shares in promising mines when they are low and, comparatively speaking, neglected. The present quotation of 10s. to 15s. certainly does not represent the intrinsic value of East Blue Hills. Amongst other low-priced tin shares Polrose are very scarce at the existing quotation of ⅝ to ⅞, and East Lovells are decidedly stronger at 1¾ to 2. A rise here is very probable.

Lead continues to slowly improve in price, but as yet lead shares have not responded to the better quotations. The time, however, is probably quickly approaching when the market for lead shares will become more buoyant.

Amongst copper shares Prince of Wales and Carnarvon have been in good demand. Both are much scarcer at existing quotations. These are both very low priced shares, and adding Parys Corporation probably no cheaper triad could be found upon the market at the moment. A substantial rise in copper (a likely event) would send up the prices of these cent. per cent. Investors should also not overlook Wheal Crebor, which are ridiculously cheap at present.

Indian gold mines have been in good demand, and prices remain extremely firm all round. Amongst other gold mines Javali have advanced, and Frontino have declined. The English Australian gold mines are making steady and very satisfactory progress, the last advices again showing a profit on the month's working. Potosi are rather quiet at about par.—JAMES H. CROFTS.

From Mr. JOHN B. REYNOLDS (Advertisement).—The settlement, which has been heavy, has passed off satisfactorily, excepting in those cases which were weak speculators have bought for a rise, and have been obliged to close their accounts. We have repeatedly urged the danger of persons buying what they will not be ready to take up and pay for on the appointed day. Speculators in the mining market run special risk, because that market is so limited that most of the transactions of any importance which take place are known. *Bona fide* holders, moreover, as I anticipated last week, have found their positions too tempting to be disregarded, and have been realising profits; thus we have to record a decline in West Kittys, and New Kittys have been weaker in sympathy. This state of the markets, from a certain point of observation, is welcome, as it affords opportunity for buying orders to be executed. It has been almost impossible to quote accurate prices at which business could be certainly done, and we do not wonder that it has been a matter for complaint that such difficulty has existed. The fact is people were not ready for the rise in the St. Agnes Mines. It came and took the market by surprise. West Kitty shares are still very firmly held, and if intending investors are not on the alert to buy the shares—whatever the reason may be for a reaction—they will make a great mistake, and a mistake which, under the circumstances, will be unpardonable. It is true that all has not been said about the mine which might be said, but it is equally true that enough has been stated to prove to the most uninitiated that West Kittys are amongst the very safest shares on the market that investors can take. We therefore recommend the stock as a safe investment for any reasonable amount of money.

West Polbreen shares have been in considerable demand. We have had buying orders on our books for days, hoping for easier markets, but the easier the markets the more eager will buyers be who know the merits of the district. West Polbreen shares, without doubt, are getting much scarcer week by week, and here we anticipate in the not far distant future a close proprietary who will not allow their shares to get on the market at all. Killifreth shares have again been favoured with a large amount of attention, and it is to be hoped that this discovery will lead to something good. We are reminded by correspondents that we called attention to the shares when they were being almost given away. We asked what are the Killifreth shareholders about, and endeavoured to inspire them with a little courage. But it appears our remarks were very little heeded, as several shareholders since then have given up the connection with the mine in despair. Now they can dwell upon their folly at their leisure, of which, judging by their sagacity, they doubtless have plenty. The settlement for New Kitty shares has been a very heavy one, but here again the market is overcharged. The inference to be drawn is creditable in the highest degree to the mine itself, and it speaks well for the future of prices. A word to the wise is sufficient. In well-informed circles a rise we know is looked for. Market operations cannot possibly be put down, but we feel justified in stating that with such market operations no one at the company's offices, nor indeed any officers of the mine, has anything whatever to do. Surprise need not, therefore, be expressed that so little is known of quotations at the company's offices. About the mine itself everything can be gathered, however, by *bona fide* shareholders, and without reliable information it is scarcely wise to operate in any stock—much less in mines. The decline in East Pool shares was like the decline in Dolcoath shares some short time ago—simply absurd. The public should surely know by this time that the more eager the market is to buy shares the more ready are the buyers to depress prices. But as a rule it must be remembered that shares which have been lately so much in demand have been in request entirely on the merits of the mines themselves. We never knew a period when the public had such a good selection at such favourable prices as at the present moment.

FOREIGN MINING AND METALLURGY.

The aspect of the Belgian iron trade has become rather less favourable, although prices have remained at about the same level. The works being well off for orders, consumers have shown a disposition to postpone business until the pressure of affairs is less urgent, when of course they hope to secure less favourable terms. Old rails have shown considerable firmness in Belgium; this result is due to a simultaneous demand both on American and French account. The demand for pig has ruled firm in Germany, and considerable transactions have taken place; almost all the works have contracts in hand for some time to come. Stocks are reduced, but at the same time the large production which is continually taking place prevents prices from advancing in proportion to the business done. The rolling-mills are well off for orders, and the prices obtained for their products have shown an upward tendency. Ordinary plates have made 9*l.* 10s. per ton; boiler and plates, 10*l.* per ton.

Prices have shown little change in the Belgian coal trade. An advance has been attempted in the Liége and Centre districts, but it has not become general at present. Certain reductions which have been made in railway tariffs are only applicable at present to deliveries effected to and from the stations of the North Belgian, the Liége and Maestricht, and the Liége and Lembourg Railways. In connection with a concession for lighting Constantinople by gas, it is stated that the consumption of coal will amount to from 400,000 to 500,000 tons per annum, and that the cost of the plant to be supplied will be from 200,000*l.* to 240,000*l.* There has been a good demand for coal and coke in Germany, and prices have acquired additional strength. The approach of autumn has exerted its usual influence upon the demand for domestic qualities of coal. The production of coal in Westphalia and the Rhenish provinces is, however, so considerable that it is doubtful whether prices can rise much beyond their present level, even although the winter season may bring with it increased activity as regards orders.

The demand for iron has been a little more sustained in the St. Dizier group (France). The forgemasters are making every exertion, but they are still in arrear with their old contracts, working operations having been interrupted during the last two months by want of water. The result of all this is that prices, instead of showing the weakness which is usually observable at this season of the year, now exhibit considerable firmness. Coke-made iron has been quoted at 8*l.* 16s. per ton; and mixed iron at 8*l.* 8s. to 8*l.* 12s. per ton. Sheets have been in good demand. Pig for re-founding is in good demand; there are orders on hand for several months in advance; No. 3 is worth 3*l.* 10s. to 3*l.* 12s. per ton. Paris iron merchants appear to have resigned themselves to an acceptance of the terms proposed by forgemasters in the Nord. Merchants' iron has been quoted at 7*l.* per ton, but an advance of 10s. to 15s. per ton is regarded as probable. This is all the more likely to be the case since the works of the Nord are overwhelmed with orders. Tenders have been invited for the supply of 21 locomotives to the Upper Italy Railway. A Belgian firm is stated to have obtained a contract for the execution of the Moguer iron bridge (Spain); the works are to be executed within three months. The imports of Bessemer steel rails into Russia have sensibly declined this year.

RICHMOND.—Information has reached London that discoveries, beyond those announced by the company, have been made in the deeper workings. The Ruby Hill Mining News, referring to the position and prospects of the property, states that the mines are provided with all necessary machinery, and the Richmond smelting works are the most extensive and best appointed of the kind on the Pacific coast. The works consist of four furnaces, two of which have an average capacity of 90 tons daily, one of 70 and one of 50 tons. All the furnaces as now constructed are of the hydrocycle type, which is found much more economical in construction and operation. They have recently been thoroughly overhauled, repaired, and improved. In connection with the smelting works there is an extensive refinery, in which the silver and gold contained in the bullion as it comes from the furnaces is parted from the lead. Other mining companies in this State producing base bullion ship it for refining either east or to San Francisco at considerable cost for handling and working, but by the refining being done on the ground the Richmond has not only effected a great saving in cost of refining, but has been enabled to retain its lead in times of a depressed market for that metal. At this time the company has on hand the largest supply of lead it ever accumulated. A rough estimate would place stock of bars at about 60 yards square by 6 ft. high. Since the first purchase of the Richmond property the stockholders have never been called on to contribute one dollar towards its development or support. In addition to the amount paid in dividends a large sum has been expended in litigation and in improvements at the mines and reduction works, the latter having been once destroyed by fire and rebuilt. The lowest point attained in the mine is 1100 ft., which has just been reached by the perpendicular shaft. The quartzite encountered in the last 50 ft. has been used for flux, which at this great depth is one of the most encouraging signs ever met with in the mine, pointing, as it certainly does, to the permanency of the ledge. There still remain in the upper levels of this property the enormous bulk of seven acres of rich ore, or, in other words, an assurance of quarterly dividends ro its stockholders for years to come. In drifts, winzes, &c., there has been more labour performed in the Richmond than any other mine in the district, and in almost every direction the company has reaped rich returns for its energy.

EBERHARDT.—Extracted from the "Nevada Weekly Territorial Enterprise."—White Pine: Where I arrived six weeks ago, I found a great change in Hamilton and Treasure Hill. Hamilton has not been rebuilt to one-third of its former greatness before the fire. The people who have remained here have great faith in the future of this mining region. The Eberhardt tunnel is still progressing, which is certainly the greatest piece of work in the State, standing second to Sutro. At present the indications are very good to soon find something like the times of 1868. I believe the time is not far distant when old Treasure will show as rich as in 1868. Everyone knows that richer mines were never known in Nevada than were found on Treasure Hill in early times. No great work has been done in prospecting since I left in 1872, with the exception of the Eberhardt tunnel. Now, it stands to reason and experience that not much could be expected in the business of mining unless developments are made. I venture to say that more money has been expended on the Sierra Nevada Mine of Virginia City than has been expended on all the mines of White Pine, outside of the east tunnel. Holes innumerably have been sunk all around for miles. This is about the sum of all work; yet White Pine is cried down because rich ores were not found by mere "coyoting." I think and firmly believe that White Pine mountain will some day show up as great bonanzas as the Richmond and Eureka Consolidated. In all my ramblings I have never seen better indication of base metals than is shown in White Pine mountains. Only one mine has been worked to any extent—the Jennie A. Tons of ore are now in sight awaiting to be taken to some smelter or reduction works. Hundreds of tons of base ore can be taken out in at least 30 different mines of White Pine mountain provided there were reduction works.

LONDON ASSURANCE CORPORATION.—The general Court have adopted the recommendation that the dividend for the half-year ending at Michaelmas, 1881, be 15s. per share, thus making the dividend for the year 1881 60s. per share, being at the rate of 24 per cent. per annum.

NEW STYLOGRAPHIC PEN.—Although it is not everyone who requires to write where ordinary pens and ink are unobtainable, there are many men of business who so constantly require to make notes that an instrument which enables them to make those notes permanent, and thus avoid the necessity of re-copying their rough pencilings, will be appreciated. To meet the wants of this large class Messrs. Letts, Son, and Co., of King William-street, City, are introducing the Wilson Stylus—a stylographic pen at one-fourth the price of anything of the kind hitherto in the market, and in every respect as useful. With the new instrument writing can be executed with the same ease as with a well cut pencil, whilst the smeared and almost illegible mass, which pencilling usually is after a little rubbing, such as it receives in passing through the post, replaced by a clear and distinct manuscript in real ink. The character of the line is similar to that produced with a style and the quantity of ink carried is sufficient for conducting a lengthened and extensive correspondence. It is claimed that the Wilso Stylus is superior to other stylographic pens because it is completely automatic in its action; is simple and cleanly to fill—actually fills itself; needs no adjustment of valve—adjusts itself; contains double the ink, and of any colour; point cannot clog or fill up—clears itself; writes with perfect smoothness—freer than a lead pencil; is ready at all times at a moment's notice; cannot get out of order, and cleans itself; and that in case of injury by accident it can be repaired at an insignificant cost. The instrument is in every respect worthy of commendation

FOREIGN MINES.

ST. JOHN DEL REY.—Telegram from Morro Velho, dated Rio de Janeiro, Sept. 12: Produce for the month of August 26,500 oits, value 10,268*l.*; yield 4·5 oits. per ton.—Cuiaba: Stamped 330 tons; yield 2·5 oits. per ton.

SIERRA BUTTES GOLD.—Result of the working at the Sierra Buttes and Plumas Eureka Mines for August:—Sierra Buttes: Total receipts, $26,877; total working expenses, $17,994.—Plumas Eureka: Total receipts, $50,046; total working expenses, $23,499; outlay on improvements, $1180=$24,679.

KOHINOOR SILVER.—A telegram received on Sept. 9 states—Struck rich in 110 level east, 5 in. wide, width increasing rapidly, indicating heavy desits, assay $236 per ton, shaft ore increasing as sunk.——Telegram received pt. 11: Shaft ore assays $345 per ton.——Telegram received Sept. 14: Appearance mine improving, daily positive evidence nearing very valuable deposit.

LAST CHANCE.—The directors have received the following telegram from their agent at Salt Lake:—"In Hooper Mine we have during last week run 19 ft. in tunnel No. 2. In Last Chance Mine we have drifted easterly 14 ft.; last discovery of ore shows continued improvement. In Opulent Mine we have run 15 ft. in tunnel No. 3; a good ore seam near. Hanging-wall about 6 ft. thick."

SENTEIN.—Report for the month of August: Crude ore raised from the mine, 1171 tons of 1000 kilos.; crude ore sent from the mine to the dressing floors, 1196 tons ditto. Crude ore dressed, 1096 tons of kilos.; ragging and tailings dressed, 100 tons ditto; total, 1196 tons ditto. Market lead ore produced, 1st class, 57 tons of 1000 kilos.; 2nd class, 29 tons ditto; blende ore produced, 1st class, 370 tons ditto; 2nd class, 20 tons ditto. The report on the mine is expected next week and will be published when received.

CHILE GOLD.—The return of gold from the Chile Mine for the month of July amounted to 431 ozs. The above yield was obtained from the work of only 10 stamps, and represented the free and coarse gold in the ore. The sulphurets which contain the greater portion of the gold have been saved for future treatment. Arrangements are now being made to erect works capable of treating the sulphurets in a most efficient manner.

COLORADO UNITED.—Advices from the mine are to the effect that a considerable increase in the returns of ore may be looked for when the new hoisting-engine is in operation, also that the engine is expected to be at work not later than the end of the present month. A new tunnel is being driven with a view to cut the Tycoon lode, and two small lodes have been already cut. The mine continues to look well, and the mill to be in good order.

PITANGUI GOLD.—Mr. T. S. Treloar, Pitangui, Aug. 2: We have found another vein in the Jose Candido section, the stuff being obtained from it is more productive than any before met with here, and compares favourably with that in Holland's shaft; but judging from what we can see at present it has, like all the other veins in this section, been worked down to within a few fathoms of the 15.—30 fm. Level: The ground here has improved and water diminished, and I am pleased to say the main end is now advancing in a very satisfactory manner. Moreover, in the last 6 ft. driven samples showing gold have been frequently met with, being we hope an indication that there is another auriferous clay vein in the neighbourhood. In the adit there is no change calling for notice.

LA PLATA MINING AND SMELTING.—Statement for week from Aug. 14 to Aug. 21: Ore purchased, 738 tons; ore smelted, 790 tons; silver produced, 10,165 ozs.; lead produced, 60 tons; silver-lead bars consigned to refiners, 60 tons; value of consignments, $15·266; equal to 3180*l.*

— Sept. 15: Cablegram from New York: The net profit for the month of August is $16,140 34 c., equal to 3362*l.* 11s. 5d.

PIERREFITTE.—The manager reports (Sept. 10):—There is no change to report in the south mine. In the north mine, No. 3 stope, over No. 1 level, yields 5 tons of lead ore per fathom. No. 5, below No. 1 level, is being prepared to work on a strong portion of the lode left standing by the side. I expect shortly to be able to report more definitely of its value. The cross-cut south in No. 2 level has improved, and we are sending down ore from this point of more than average quality, and at no point is a discovery of ore of greater importance. In No. 3 level there is an improvement in the ground, and better progress is being made in driving. Our water appears to be gradually increasing in quality, and our dressing operations are proceeding with regularity.

RICHMOND CONSOLIDATED.—Cablegram from the mine at Eureka, Nevada:—"Week's run, $43,000, from 883 tons of ore. Refinery, $45,000."

— R. Rickard, Aug. 24: I beg to hand you report of the different operations for the past week. North drift from Lizette cross-cut has been extended 3 ft. in loose ground. The 200 south drift has been advanced 7 ft. in more favourable ground. The 200 north has been drifted 16 ft. without any change. The 200 west from shaft has been extended 17 ft. in favourable ground for drifting. The rise in back of the 200 is now up 73 ft.; the ore in present back is 4 ft. wide, and of better quality; this point is looking very encouraging for the finding of an ore body. The 300 north drift has been advanced 7 ft. in hard limestone. The 400 north from No. 11 chamber has been extended 10 ft., ground more favourable for drifting. The 700 east has been advanced 23 ft. in shale. The rise in back of the 700 is still in ore, and looks very promising. The shaft is now down 309 ft. below the 900, and first set of timbers are in place for the 1200 ft. station; the shaft will be sunk 30 ft. below the 1200 for a sump, which will be completed about the end of the month. The furnaces are doing good work, and the machinery both in mine and smelting works is in good working order.

RUBY AND DUNDERBERG.—Report on mines for the week ended Aug. 21: Dunderberg: The 700 ft. level has been advanced 31 ft. during the month: total, 820 ft. from the shaft. This drift continues in very favourable ground, containing considerable low grade ore with occasional stones of good ore, and I have every reason to believe that we shall in a very short time encounter the No. 6 ore body, which is making down through the No. 6 winze from the 600 ft. level. A cross-cut has been commenced in an easterly direction from the 700 ft. level at a point 150 ft. south of No. 2 winze. This cross-cut has commenced on a seam of ore about 6 in. wide, which has increased to 2 ft. in width of good ore, I consider this a very promising prospect, as it is making in the direction of the No. 2 ore body, and I believe this will prove to be a branch of the same. The south drift, 50 ft. above the 700 ft. level, is in very promising looking ground, containing a little low grade ore. This drift will be connected with the winze from the No. 2 ore body in a few days. The winze from the south drift, 55 ft below the 600 ft. level (No. 2 ore body), has been sunk 7 ft. in good ore during the week: total, 17 ft. No. 2 ore body is looking well, and producing the usual quantity of ore. The No. 5, north of winze, does not look so well. The ore has narrowed down to about 1 ft. in width. The No. 5, south of winze, is rather low grade at present. The No. 5 winze, below the 600 ft. level, is now down 95 ft. At this depth a stream of water was encountered, which could not be handled with a windless. Consequently we are now drifting from the bottom of the winze in the direction of the 700 ft. level, and will make the connection by means of a rise from the 700 ft. level. There is no change in the 300 ft. level west; progress this week, 9 ft. Have shipped 170 tons ore, and have 46 men and six contractors, besides tributers.—Bullwhacker: The stope above the 325 is looking well; the ore body is from 3 to 5 ft. wide, and is improving in quality. The rise from the north drift (325 ft. level) is now up 35 ft.; the ore body is improving in quantity and quality. The main incline is progressing favourably; progress this week, 22 ft.; total, 47 ft. below the 325 ft. level. Have shipped 25 tons ore this week, and have eight men and four contractors at work.

Telegram received from Eureka, Sept. 13: The week's run from the furnace was $8000 from 196 tons ore, producing 26 tons of bullion. The shipments of the week were 187 tons.

EUREKA (NEVADA) SILVER.—Report for the week ending Aug. 22: Bald Eagle: The main incline is repaired and timbered down to the 150 ft. level. This work will progress much faster, as the incline is in a much better condition from the 150 ft. level down to the bottom. The machinery will be started in a few days, just as soon as the water tanks arrive from San Francisco. I have examined the various drifts and stopes in the mine, and I find several good prospects which I think will develope into paying ore bodies with very little work.—Williamsburg: The stopes between the first and second levels are looking well; the ore body at this point is about 6 ft. wide, of good quality. Have from 25 tons to 30 of ore at the mide ready for shipment.

Extract from superintendent's letter from Eureka:—The engine is in place, and the only things we are waiting for are the water tanks, for which I have received the bills of lading this morning, and they will be here in five or six days, when they will be immediately put in place, and a drift started on the 150 ft. level. The Williamsburg is turning out ore this month; the produce will be between 40 to 50 tons, which will leave a fair profit.

DON PEDRO.—Mine Captain's half-monthly report, Aug. 19.—Drainage: Jack head lift being in fork on Aug. 11 we got down the bucket rods and connected same, put in a road to carry chain, so that it should not catch anywhere, and started the drop lift on Aug. 12, 8 a.m., from which time to 11.30 a.m. it worked beautifully and smoothly, when a burst occuring under water choked the lift and kept two men in cistern of jack head throwing out sand until the rod worked up and became immovable when it was disconnected; cistern of jack head cleared, and that lift made all right, when attention was directed to put in the necessary timberwork required for fixing winch down in shaft near its work, and try and draw up the lift by same, since when we have fixed the winch and other necessary gear, and drawn up the lift about 20 ft., took off top pump and stowed it away, and stop rod and sent it to the smithy; the bucket rod is so tight in the lift, blocked with sand settling around it, that on trying to draw the rod out of the lift with the winch, as we tightened the winch the lift come up bodily, and we have drawn the lift 15 ft by the rod. I think we shall have to draw up the lift and clean it, probably it will not go to work before next week. It is most fortunate that on leaving this lift under water it was left so that it could be drawn up at any time, and drop chains fastened above cistern; if it had not been for this foresight we should have to drop two lifts to redeem the one. Bucket changed twice, stuffing box packed twice, two linings changed.

Mr. Treverton writes under date Aug. 19: Since my last, engine has not been put idle, except for the requirements of the mine, such as changing bucket, packing stuffing box of jack head lift, changing linings, &c., during which stoppages I availed myself of same to adjust a new valve, cast here, and put it to work; it works well. Other packing, &c., attended to, and machinery throughout working very satisfactorily.

JAVALI.—Extract from Manager's letter, dated Aug. 6: I beg to hand the following as my report of the past month's working, and it gives me extreme pleasure to be able to send you such an excellent one—in fact, the best we have had for some years.—Mine: One way and another a good deal of work was done, chiefly in the interior, both for opening out ground and for the actual supply of quartz to the mill. The second rise, in Pollock's tunnel, was run 11 varas; we have now only 16 or 18 varas to get through, and the accomplishment of this work I shall hail with great pleasure, as by the means of the shoot there will be greater facility for bringing down the stuff to the mill. The end of Pim's tunnel was only driven 3 varas; the ground is harder than ever, and this month I am obliged to put another contractor, the old one refusing the work. The quartz is exceedinuly poor—in fact, too much so to bring to the mill. The chief supply to the mill was from the various stopes and from the Concepcion and Timpisqui mantos. Concepcion yielded 572 cars of not very good quality stuff, but most payable for the price we can get it to the mill for—25 cents per car. The average of the quartz improved greatly all through the month. Whether this good fortune will continue I cannot say. The stuff I intend to bring to the stamps will come from the same places.

Mill and Remittance: Soon after the departure of last mail we had some heavy rains, and they continued throughout the month, so that we were able to work 25 days with 30 stamps, crushing 2426 tons of quartz, which yielded 564 ounces of gold, making an average yield of 4 dwts. 15½ grs; the total remittance, including the result of the Esperanza Mill, consists of 692 ozs. of gold. The mill is in excellent order, and if the water power continues there will be nothing to prevent our running all through the present month with 30 stamps.—Esperanza Mill: The result here is equally as good as last month, and I am more than ever satisfied with the working of the square stamps. They crushed in 24¾ days 340 tons of very hard quartz, which yielded 103 ozs. of smelted gold. I also treated 138 tons of tailings, part from the square stamps and part from the upper mill. These yielded 25 ozs. of gold, making an average of 3 dwts. 14 grs. The average of the quartz crushed was 6 dwts. 1½ grs.—1 gr. less than in June.—Receipts and Expenditure: The expenditure was 1069*l.* 6s. 3½d.; the remittance is valued at 1800*l.* The expenditure was rather high, but this is owing chiefly to the extra expenses of the Esperanza mill and the opening of ground in various parts of the mine.—Health and Labour: Dr. Birt sends his report. Labour rather scarce.

CHONTALES.—Aug. 5: At Consuelo, in the diagonal level going east (referred to in my last letter), after driving a few varas the lode improved, when I at once put the men to rise under the shoot from the back of the main level. The rise is now going on above the upper level, and when communicated with the surface will be for ventilating the mine. In the course of rising the lode here has sometimes been worth an ounce of gold to the ton. I am now continuing the upper level, east of the rise, through a profitable lode, and over the hard ground gone through in the main level below. Like at San Sebastian, the gold here appears to dip east over the hard ground, as in the present end of the main level, which is east of the rise and level above. We have got out of the hard ground, and have now a very good paying lode, with ground favourable for progress. It is rather early yet, perhaps, to say how much profitable stoping ground we have here until we are further advanced with the main level and have another rise put up, but if the level and rise continue as at present we shall have, I calculate, by another month about 2000 tons of quartz laid open for stoping of an average yield of not less than 5 dwts. per ton. Should this profitable quartz now discovered prove to be a continuation of the run of rich quartz they had formerly here with the old workings (which I think very likely) we may expect equally good results from the eastern ground, and that Consuelo will open out a good and lasting mine for the company. During the past month the main level has been driven 19 varas. The ground in the present end is now better for progress, and the lode is 3 ft. wide, and worth 4 dwts. per ton. A No. 2 level has now also been driven 22 varas over the hard ground passed through in the main level below. The lode here is very favourable for working, and for the last 15 varas from 2 to 3 ft. wide, and worth on an average 5 dwts. to the ton. In the new ventilation rise the men have rose 25 varas from the back of the main level. The lode at present is 3 ft. wide, and worth 8 dwts. to the ton. Total quartz raised for the stamps 175 tons, worth on an average 6 dwts. to the ton. This mine is opening out well, and gives great promise for the future.—Estrella: Drove main level 11 varas. Drove No. 6 level 11 varas. Rose in new rise 18 varas; holed to surface, Stoped east and west of ventilation rise 128 varas. Total quartz raised 485 cars, or 425 tons, and worth on an average 3 dwts. per ton. Total quartz treated from both mines 500 tons, which produced 113 ozs. of gold, or an average of 4½ dwts. per ton. There is now about 200 tons of rough quartz at the stamps, which will be put through in the coming month by putting on additional stamping power. Total cost for July month, 545*l.*; value of the gold, 302*l.*: loss, 243*l.*

HOOVER HILL.—Extracts of letter dated Aug. 25, received Sept. 9 from resident engineer:—I wrote you on Tuesday last, the 23rd inst., giving you the news of our start, and that the stamps were then running fairly. No sooner had I dispatched my letter than one of the screens at one battery burst, and before the night was over all had broken, and we were compelled to come to a standstill. I think we have run about 30 tons through the stamps, and what with stoppages I calculate we ran 30 hours altogether. I notice the copper plates are beginning to show amalgam, although it is Brewer's opinion that it will take $500 of amalgam to get the plates in order, and this is absorbed with them. With the exception of these screens and the tappets everything else runs well. The mill building and foundation for stamps are perfect. With stone-breaker and 20 stamps at work, there is scarcely a tremble to be felt, and all our heavy belting runs as true as a die. Tramming down ore from old dump solely.

Extracts from letter pated Aug. 31, received Sept. 13: I wrote you last on the 28th inst., and on the 29th cabled you as follows: "After 30 hours stamping screens burst; idle until to-day; new ones arrived." We started upon Monday morning, and with the intermission of a short stoppage in the evening and morning to dress up copper plates the mill has been continuously running. We start to-morrow bringing down Gallimore ore, and I propose running 10 days on it before clearing up. The few hours we have been at work have convinced me that an additional run of blanket sluices is a necessity, and they will be put in at once, and every means taken to catch all our sulphurets, as I find from several assays made that these sulphurets concentrated yield from $400 to $450 gold to the ton. Some method for treating these at the mine will have to be adopted; or better still, in my opinion, is to concentrate them as close as practicable, and then sending them to smelting works for sale. It is difficult to estimate the quality of the ore now being stamped (old dumps) with new copper plates to start on, but amalgam is forming pretty briskly on them. Betwixt the free gold and high grade sulphurets we shall get out of the ore I believe the results will be satisfactory. The cross-cut from whim shaft is entering into ground which pans a little gold, but we require some feet more driving before we enter into the auriferous ledge before us. All other points underground are progressing as usual with little alteration to notice.—Compressor and Drills: The contractor has many men at work on this; everything is on the ground except boiler, which is expected daily. Amalgamating pans and settler are being erected, and will be shortly put to work; in the meantime we are storing the blanket sand to be worked in them. I expect our assayer here on Monday next.

EBERHARDT.—F. Drake: Statement of progress for week ending Aug. 20 6000 ft. Drift West: Feet run to Aug. 13, 573; run for the week ending Aug. 20, 34 ft.; total distance run to Aug. 20, 607 ft.; for the month of August, 78 ft.—2000 ft. Drift West: Feet run to Aug. 13, 43 ft.; run for the week ending Aug. 20, 12 ft.; total distance run to Aug. 20, 55 ft.; for the month of August, 38 ft.—2000 ft. Drift East: Feet run to Aug. 13, 55 ft.; run for the week ending Aug. 20, 10 ft.; total distance run to Aug. 20, 65 ft.; for the month of August, 28 ft.—Remarks: The driving in the 2000 ft. west has been breaking more fadourable for quartz. Lime has taken the place of spar, and is of a character favourable to contain ore. The 2000 ft. east continues the same—lime, quartz, and spar; shall very soon commence the upraise.—Summary for July: From the 2nd to the 6th the drills were not running, occasioned by return of the "National Fourth." For our actual running time (27⅔ days) for the month, we made very good progress:—6000 ft. drift west advanced 135 ft., 2000 ft. drift west advanced 17 ft. (hand work), 2000 ft. drift east advanced 22 ft. (hand work): combined length of drifts for the month, 176 ft., all driven for prospecting purposes. The essential change met with during the month was the finding of quartz in the 6000 ft. drift—certainly an encouraging fact, leading us with good reason to hope that we may soon find some portions of it mineralised to a degree that it may be called ore. On the 17th of the month work was resumed in the 2000 ft. drift east (the John Wild north), and we have found considerable quartz; and particularly has all of the rock been of a hard and very siliceous character—hard to drill, but breaks fairly. Having more quartz in these drivings than during many long months previous, the outlook at close of the month bids considerably fairer than at the beginning. I scarcely need to mention the work in the 2000 ft. drift west, for we have effected but little more than a beginning, and that mainly in white spar. At all points every part of the work runs smoothly.

CALLAO "BIS."—The directors of the above company have received from the resident manager the following report, dated Aug. 5:—Progress of Works: Main Shaft: During the month of July everything has been activity itself, the principal progress having been made in timbering, legging up, and dividing the main shaft, which is now completed. The drift westwards in the No. 2 shaft has been extended 84 ft. in the direction of the No. 1 or main shaft, and now that the timbering is completed in the latter the drift east is being pushed on to communicate with the drift west of the No. 2 shaft. This will prove the whole of the ground immediately above water level. Since my last advices, shaft No. 3, about 200 ft. west of shaft No. 1, and in a direct line with the Callao shafts 6 and 7, has been commenced, and is to-day 26 ft. deep.—Azules Mine: The Asules Hill is now perforated from end to end by a gallery running through the lode during its whole distance from south-west to north-east 613 ft. in length. We holed through, say, four days since, and I have been continuing my explorations to the north-east. The lode is evidently continuous, in some parts large and solid, and carries precisely the same dip as heretofore. The company is perfectly secured as regards its future in the possession and ample development of the Azules Mine. I will not commit myself to figures by this mail, but hope in the course of a mail or two to be able to assure you of the continuance of the Azules lode, beyond all doubt, for a length, at least double that which I have just reported as opened upon.—J. H. THORNTON.

GOLD COAST.—Aug. 1: I have nothing very particular to report upon this week. The lode in the tunnel and shaft much the same as last week—still keeps very rich. I have a fine pile of rich ore at surface, and have begun to carry valuable stones to your house. I have opened in the shaft and tunnel about 70 ft. on the course of the lode, and so far I find the strata in their proper position; no fault, no slide, to cause any interruption in the lode. On this I rely, in confidence that the lode will keep good and rich. I am very anxious to hole from tunnel to shaft. I am making all progress I possibly can. We can talk to to each other from tunnel to shaft, so you see the distance is not very great.

Aug. 8.—I am making all progress I possibly can with the underground work. I expect to get a hole from shaft to tunnel early next week. The shaft still keeps very rich. The south end in the tunnel is much the same as last week—very good and unchanged. The north end has very much improved. I cut a caunter forming a junction in the main lode of this north end, and on the north side of this junction I have a much richer lode. I wish I could just hand you a stone from this end.

CANADIAN COPPER AND SULPHUR.—Francis Bennetts, Sept. 2: Bolton Mine: The vein in the south shaft sinking under the 10 fm. level is producing some very good stones of copper ore.—St. Francis Mine: There is an improvement in the vein in the winze sinking under the adit level, east of shaft, the ores are becoming more concentrated.—Acton Mine: We we are blasting out the black shale containing ores, and occasionally obtain good quantities of rich yellow copper ore.—Hartford Mine: There is no important change in the vein in the different workings at either Nos. 1 or 5 shafts. At the smelting works we have commenced to fill the ore burners, and shall in a few days begin the working of the ores for smelting.

Telegram received from Capt. Bennetts Sept. 13: "Burning ores for smelting."

PONTGIBAUD.—W. H. Rickard, Sept. 6: Roure Mine: The sinking of Taylor's shaft below the 200 metre level was resumed, with other works on the mine, on Aug. 19, since which date it has gone on regularly; the rock is rather harder than previously. The 175 metre level south produces stones of orestuff irregularly. The ground in the 100 cross-cut east is more favourable, and we hope in a month's driving to cut the eastern part of Virginie's lode. The 60 metre level north, on the caunter lode, is unproductive. The 20, in the same direction, yields ¼ ton of ore per cubic metre. In the same level south the eastern part of Virginie's lode continues to present a regular appearance, but is yet unproductive. The adit south of the Mill cross-cut is poor. The adit south at Seysoubre has entered a more regular vein, but yet unproductive.—St. Denis: The clearing and repairing of the stollen have gone on favourably since the work has been resumed. The sinking of the new shaft from surface is being kept on with a full force of men. There is nothing new in the tribute pitches at Mioche.—La Brousse: The 160 metre level, south of Alice's shaft, is unproductive. The same level north of the shaft yields a little orestuff. The 140 metre level south yields ¼ ton of ore per cubic metre. The 120 metre level, north of Basset's shaft, yields a little low quality saving work. The 100 metre level, south of air-shaft, is unproductive.—Pranal: The 110 metre level, south of St. George's shaft, is unproductive. The 90 metre level, north of shaft, yields ¾ ton of ore per cubic metre. The same level south yields stones of ore. The rise in the 70 north is unproductive. The winze below this level, a little ahead of the 110, yields ½ ton of ore per cubic metre. The 50 metre level south has entered disordered ground. The 80 south yields stones of lead ore and blende irregularly.—New Trials; The level driven to prove the lode north of shaft, at Pichadoire, has been suspended, the lode having presented a poor and unkindly appearance. At Malseignthe lode in the shaft continues to present a regular appearance, being 40 centimetres wide, composed chiefly of quartz, and at times spotted with silver-lead ore.—Surface: We have built the foundation for the drawing engine at St. Denis, and are now proceeding with the building of the new drawing engine house at La Brousse. Our sampling has amounted to 166 tons of lead ore.

PESTARENA UNITED.—Samuel Gifford, Sept. 12: Pestarena District: In the 65 end south the lode continues small although very promising, and produces 3 tons of 1 oz. 8 dwts. per fathom. At the 80 north the end is very stiff, and without ore. The 100 south, on west branch, shows a small vein of saving work; but this tends too much east to be the continuing line we wsh to find. At the 110 south a little ore is coming in on the east wall, and there are signs of improvement further ahead also, the present yield being 1 ton of 1 oz. per fm. The 33 winze on No. 5 shows no change from the quartz, &c., last reported, and the produce from it is estimated at 7 tons of 3 dwts. per fathom. In the rise against this at the 65 south the rock remains also the same—large masses of quartz of low grade, estimated to give 6 tons of 7 dwts. per fathom. The winze on No. 5, under the 65, is much troubled with water, and progress is, consequently, very slow. The lode is not cut through yet, but a little ore is being saved from the side rock. In the 90 cross-cut a small branch of pyrites has been intersected and cut through, and the end is now again in country rock. The sinking of the shaft goes on with regularity, but the lode has not come back yet. The stopes show some falling off, and it has been necessary to open some new ground to maintain the returns.—Val Toppa: At No. 1 level north, on west lode, there is still a large width of mixed rock against a good wall, but it is of no value; whilst at the same level, on new lode, the ore is broken and irregular, though carrying good branches and veins of rich pyrites, yielding 20 tons of 15 dwts. per fathom. The rise behind this goes up in low-grade ore, which improves as the work is carried south; it is now worth 10 tons of 4 dwts. per fm. The cross-cut west from the No. 1 has got entirely into unpromising micaceous schist. At No. 2, on the slide, there is again an improvement in the enlargement of the vein lately seen, and there are still hopes of its becoming of value. The large flat stope above goes forward on broken lines of quartz, which produce 10 tons of 6 dwts. At the cross-cut from No. 2 westwards there is no change. The trial end from stope on flat lode, at intermediate under No. 2, begins to show ferruginous rock, which is indicative of ore. At No. 3, on the slide, there is a return to the chloritic schist formerly driven through, but no ore. Driving at this level south on a western branch a little ore begins to to appear, and there are hopes of its being the same patch of ore seen in a winze above. The winze on the Great Quartz lode, at No. 4 level, appears to be getting to the bottom of the ore, although a good width remains yet, but strings or bands of sterile rock are falling in, and these are generally the premonitory signs of a cutting out of ore. The winze now yields 15 tons of 6 dwts. per fathom. The stopes, with one exception, are yielding their usual quantities of ore. During a heavy fall of rain here a large mass of rock came down into the water-course of the reduction-works, stopping the mills for 40 hours; it is all cleared away now, and the mills are at work again.

AUSTRALIAN MINES.

ENGLISH-AUSTRALIAN GOLD.—Mr. Mark Pollard, Fryerstown, Aug. 1:—420 ft. Level: The drive going south from No. 1 rise is in 48 ft. from the rise. We have a flat body of stone in this drive, and 3 ft. of stone about 12 ft. from the footwall in the western wall, quartz very hard; have not seen any gold in it, but it is very good-looking stone, with slate and sandstone country.—320 ft. Level: The rise from the back of this level is up 26 ft. It has passed through one small leader of quartz on the western wall, but it is in hard sandstone country. I have not seen any gold in it. I am thinking of driving a cross-cut at the 420 ft. level to the west toprove the ground between the eastern and western shaft, as there is a large body of stone at the surface between the two shafts. I think it would be advisable to prove the ground between the two shafts.—332 ft. Level: We have not holed through to the tributers' old workings; as yet the quartz in the drive is small; see a little gold in it. We have a large body of stone over the back of the drive to block out as soon as we hole through, which I think payable, but very bad ground to work.—240 ft. Level:—I have driven west through the quartz; in driving we came to a black slate which cut off the quartz. We are now driving southwards towards the No. 2 rise with good-looking stone. I have not seen any gold as yet, but I think it is payable. It is full of white mundic, which is a good indication for gold in this black slate country. Driven south 15 ft.—The 210-ft. Level Prospecting Shaft: We have completed this level, and have a truck-road into the workings of the 180 ft. level, and have commenced to break stone from the old face. The quartz will go to the prospecting shaft with quarter of the labour it took to get it to the No. 2 rise.—The 180-ft. Level: The block of stone in the cross-drive we have driven through to the south boundary, and have commenced to stope back on the boundary. This is also a bad stope to work, as the No. 1 tributers of the New Era Company have left their ground to come down on us.—The 150-ft. Level: The stope in the back of this level is looking just the same; quartz still going north, and dipping very fast in the north end. Have not seen any gold in breaking the stone, which is of a rusty nature, and bad for seeing gold. I have commenced to drive the level north of the curve with four men, two shafts. I expect to meet with quartz in driving this level.—The 70-ft. Level: This has been extended 8 ft. during the past fortnight, and one small leader showing gold, but it is very hard sandstone. We have slate country in the face now: total from rise 78 ft. We have crushed 863 tons of stone during past month; result, 136 ozs. 16 dwts. retorted gold, the gold this crushing being very fine, which I think came from the back of the 180. The prospects of your mine are looking just the same.—Western Shaft: I have completed the drive at the 110 ft. level into the winze, and have put the men at the bottom to drive north and south on the western wall. I have got about 20 tons of stone at the surface, and have seen gold in breaking it in the south drive. The lode underlays to the west about 5 ft. in 6 ft.—stone from 2 to 3 ft. thick on the westorn wall, and leaders making off to the east, intersected with slate and sandstone. The shaft has been sunk another 10 ft. below the 110, and the cross-cut driven to the lode, and a winze sunk and connected with the same. But very little work done at the 210 ft. level—only a level driven north 15 ft. on the eastern wall of the lode, where the quartz is about 2 ft. in thickness. The cost for the four weeks were 432*l.* 9s. 9d.; and the returns one bar of melted gold, weighing 134 ozs. 9 dwts., valued at 540*l.*, now on its way to this country per P. and O. steamer Venetia.

PORT PHILLIP AND COLONIAL GOLD.—Clunes, Aug. 1: Quantity of quartz crushed for the month ending July 13, 4071 tons; total gold obtained, 779 ozs. 14 dwts. 12 grs.; average per ton, 3 dwts. 20 grs. Receipts (including 1330*l.* 1s. 2d. obtained from tributers), 1888*l.* 4s. 3d.; payments (indluding 341*l.* paid for firewood), 2179*l.* 0s. 8d.; loss, 290*l.* 16s. 5d., which deducted from the previous balance, left 772*l.* 3s. 2d. in hand, which was carried forward to next month.

VICTORIA (London).—Result of the month's operations of the South Clunes Mine, ending July 20, as follows:—Total quartz crushed, 4161 tons; total gold obained, 737 ozs. 10 dwts.; yield per ton, 3 dwts. 13 grs. Receipts, 1723*l.* 1s. 7d.; payments, 1664*l.* 0s. 9d. Profit, 59*l.* 0s. 10d.

YORKE PENINSULA.—Ore Returns: 464 tons of ore of nearly 15 per cent. (including the 100 tons mentioned in the last report) had been sent away for sale or shipment, and there remained on hand at the mine on Aug. 1 last 1610 tons of ore, of about 16½ per cent., with 4450 tons of low-class ores of about 5 per cent.

ST. JOHN DEL REY MINING COMPANY (Limited). — Advices received Sept. 14, 1881, ex Tagus, dated Morro Velho, Aug. 18:—

GENERAL OPERATIONS.—The following table of gold produce and yield per ton of mineral treated shows a slight falling off compared with that of June. The decline in the tonnage yield, partly compensated by an increased mill duty of 463 tons, is due to the forced treatment of a greater proportion of low grade mineral, which at present is closely associated with the pure mineral contents of the lode.

GOLD PRODUCE FOR THE MONTH OF JULY.—The gold obtained during this period amounts to 29,091·7 oits., equal to 3353·7997 ozs. troy. It has been derived as follows:—

	Oits.		Tons.		Oits. per ton.
General mineral	16,383·6	from	3990	=	4·106
ditto Elephant	185·3	,,	58	=	3·194
ditto Praia	2,629·5	,,	608	=	4·324
Mineral free from killas	8,615·8	,,	1218	=	7·073
	27,814·2	,,	5874	=	4·735
Re-treatment	1,277·5	,,	—	=	0·217
Total	29,091·7	,,	5874	=	4·952
Add recovered from crucibles, &c.	220·0	,,	—		—
Total	29,311·7				

COST AND PROFIT.

Produce for July	29,311·7 oits.	
Less loss in melting	135·2 ,,	
	29,176·5 oits., at 7s. 9d. per oit	£11,305 17 10½
Cost		7,763 18 8½
Profit		£ 3,541 19 2

MINE.—Mineral raised from the mine	6019 tons
Mineral quarried per borer per diem	1·61 ,,
Average attendance of borers daily	143·38
Average attendance of natives daily	342·27

OUTPUT.—The above return of mineral raised is the highest yet obtained, and considering the advanced dry season, and forced weekly stoppages for the lowering of timber and current repairs, is highly satisfactory.

MEASUREMENTS FOR THE MONTH OF JULY.

Sinking sump vertically, 4 ft. 9 in.; condition of lode and killas bar as last reported; width of pure mineral contents, 30 ft.

Drivings: Level under roof, section 214, extended 11 ft. 1 in.; lode indications more favourable; entire present forebreast composed of medium grade mineral. Driving section 278 extended 16 ft.; no change to advise.

Section 255 extended on the course of the slide 9 ft. 7 in.; the proportion of mineral in the forebreast has increased.

Mineral level to B shaft extended 24 ft. 9 in.; the communication, it is expected, will be effected during the current month.

Section 276 temporarily suspended.

Eastern Section: The sump has been sunk 4 ft. 9 in., the mineral raised therefrom being of fair average yield. Another stope west from same has now been formed. Width of pure mineral contents, 17 ft.

Stope 299 C: The encroachment of killas bar on its north side is less defined.

Stopes 298 A and 277 C and D: The further westerly advance of the former has resulted in the part intersection of the B lode on the north wall side. The latter sections now embrace the entire area of the B lode within which the relative proportions of pure mineral and killas are without alteration.

At the most westerly point of the stope, say section 276 D. the slide has been pricked.

EXPLORATIONS.—Section 214 has further improved. In the forebreast the proportion of pyritic mineral is larger, and the lode generally less intermixed with killas. As these indications go far to strengthen the opinion that there exists a large body of mineral west from this horizon, the entire width thereof is now being stoped direct from the A. sollar.

All the other parts remain as last reported.

CUIABA.—GOLD PRODUCE FOR THE MONTH OF JULY.—737·5 oits., from 281 tons, equal to 2·624 oits. per ton.

EXPENDITURE ON CAPITAL ACCOUNT.

Surface machinery and other works	£ 906 2 9½
Mining, milling, and deep adit cost	678 19 1½
	£1585 1 11
Less value of produce	298 1 5½
Excess of expenditure	£1287 0 5½

The higher gold return is due to the resumption of work in Vaz's sink. At this point the lode maintains its formerly reported width, and the yield per ton of the last division, 3·397 oits., if continued is certainly an encouraging indication.

DEEP ADIT.—The extension for the month is 76 ft.

MORRO VELRO—GOLD EXTRACTED TO DATE.—The produce for the first division of August, a period of nine days, amounts to 7788·5 oits., equal to 897·8871 ozs. troy. It has been derived as follows:—

	Oits.	Tons.	Oits. per ton.
General mineral	4,236·0 from	1228 =	3·449
ditto Elephant	235·3 ,,	72 =	3·265
ditto Praia	574·0 ,,	166 =	3·457
Mineral free from killas	2,346·9 ,,	340 =	6·902
	7,392·2 ,,	1806 =	4·093
Re-treatment	396·3 ,,	— =	0·218
Total	7,788·5 ,,	1806 =	4·311

MINE.—Return of duty for 14 working days:—

Mineral raised from the mine	3153 tons.
Mineral quarried per borer per diem	1·80 ,,
Average attendance of borers daily	124·57
Average attendance of natives daily	307·85

Telegrams received:—On August 23, dated Rio, 22nd—"Produce nine days (first division of August), 7750 oits.; yield, 4·3 oits. per ton; profit for the month of July, 3600*l*. Limited extraction of mineral free from killas Eastern division."

"CUIABA.—280 tons stamped in the month of July; yield 2·6 oits. per ton."

On Aug. 30, dated Rio, 29th—"Produce 12 days (second division of August), 10,000 oits.; yield, 4·5 oits. per ton."

On Sept. 13, dated Rio, 12th—"Produce (month of August), 26,000 oits.; yield, 4·5 oits. per ton."

"CUIABA.—330 tons stamped; yield, 2·5 oits. per ton."

LIST OF SMELTING, METAL EXTRACTION, ARSENIC, AND BARYTES COMPANIES IN THE UNITED KINGDOM, 1879.

(From the Mining Record Office Statistics.)

TIN.

Thomas Bolitho and Sons, Chyandour, Cornwall.
Williams, Harvey, and Company, Trethellan and Mellanear, Cornwall.
Daubuz and Company, Cavedras and Treloweth, Cornwall.
R. R. Michell and Company, Trereife, Penzance Cornwall.
Bissoe Bridge Company, Bissoe, near Truro, Cornwall.
Redruth Tin Smelting Company, Redruth Cornwall.
Calenick Tin Smelting Company, Calenick, Cornwall.
Charlestown Tin Smelting Company, Charlestown, St. Austell.
Penpoll Tin Company, Redruth.

COPPER.

Vivian and Sons, Hafod, Swansea.
Pascoe Grenfell and Sons, Middle Bank, Swansea.
Nevill, Druce, and Company, Llanelly.
Williams, Foster, and Company, Swansea.
Mason and Elkington, Pembrey.
Copper Miners' Company, Aberavon.
Charles Lambert and Company, Port Tennant, Swansea.
The British and Foreign Copper Company, Liverpool and St. Helen's.
Newton, Keates, and Company, St. Helen's.
Baxter and Company, St. Helen's.
Bibby, Sons, and Company, St. Helen's and Liverpool.
W. Roberts, jun., St. Helen's.
James Keys and Son, Whiston Works, Cheadle, Staffordshire.
Sweetland, Tuttle, and Company, Swansea.
Ravenhead Copper Company, Liverpool.

LEAD.

Bewick and Partners (Limited), Hebburn, Newcastle-on-Tyne.
Nevill, Druce, and Company, Llanelly.
Runcorn Smelting Company, Runcorn.
The Panther Lead Works, Bristol.
Blackworth Lead Works, Bristol.
Weston, Sons, and Company, Bristol.
Cookson and Company, Howden, Newcastle-on-Tyne.
Locke, Blackett, and Company, Wallsend-on-Tyne.
Executors of Jos. Dinning, Haydon Bridge.
Vivian and Sons, Swansea.
Enthoven and Sons, London.
Lock, Lancaster, and Company, London.
Pontifex and Wood, Farringdon Works, London.
Logan Edward, Birkenhead
Par Lead Smelting Company (C. Remfrey), Par, Cornwall.
Peter Glover and Robinson, Widnes Lead Works, near Warrington.
White Rock Works, Swansea.
St. Helen's Lead Smelting Company, St. Helen's.
Adam Eyton, Llanerchymor, Holywell.
The Cambrian White Lead Company, Brymbo, near Wrexham.
Joseph Walker, Parker, and Co., Dee Bank, Bagilt, and Newcastle.
Governor and Company of Lead Smelters, Nenthead, Alston Moor.
" " " Stanhope, Durham.
W. B. Beaumont, Allendale, Northumberland.
" " Rookhope, Durham.
Mill Dam Mining Company, Bakewell.
Joseph Wass and Son, Lea Lead Works, Matlock Bath.
" " " Alderwasley.
J. Fairburn and Company, Middleton Dale and Bradwell.
Snailbeach Lead Company, near Shrewsbury.
Pontesbury Lead Works, Minsterley, near Shrewsbury.
T. H. Moore Brough Works, Hope, near Sheffield.
E. Backhouse, Darlington.
Greenside Mining Company, Penrith.
The Keld Head Mining Company, Wensleydale.
John York, Pateley Bridge.
Duke of Devonshire, Grassington.
The Duke of Buccleuch, Wanlock Head.
The Lead Hills Mining Company, Lead Hills.
Lister, Robinson, and Company, Grinton Moor.
The Arkindale Mining Company, Arkengarthdale.
The (A.D.) Lead Company, Blakethwaite.
R. Milner and Company, Belde Hill.
The Swaledale Lead Company, West Swaledale.
Sir G. W. Denys, Bart., Surrender, Swaledale.
Charterhouse, Blagdon, Mendips, Bristol.
Waldegrave Lead Smelting Company (Limited), Mendips, near Wells.
The Mining Company of Ireland (Limited), Dublin.

ZINC.

Bagilt Zinc Company.
Vivian and Sons, Swansea.
William Marsden, Oldland Hall, near Bristol.
Kenrick and Son, Wynn Hall, Spelter Works, Ruabon.
Charles Titterton, Phœnix Zinc Works, Warrington Junction.
Dillwyn and Company, Swansea.
J. Collingborne, Spelter Works, Warmley, Bristol.
Joseph Thompson, Spelter Works, Carlisle.
Ryland Brothers, Warrington.
Richardson and Company, Swansea.
Crown Spelter Company.
Villiers Spelter Company, Morriston, Swansea.
Swan and Company, Maryhill, Glasgow.
Swansea Vale Spelter Company (Limited), Swansea.

PYRITES PRECIPITATE COMPANIES.

Duncan McKechnie, St. Helen's.
The Widnes Metal Company, Widnes.
The Tharsis Sulphur and Copper Company, Widnes.
" " " Hebburn; Newcastle.
" " " Birmingham.
" " " Glasgow and Cardiff.
N. Mathieson and Company, Widnes.
The Runcorn Soap and Alkali Company, Runcorn.
Wigg Brothers and Steele, Runcorn.
Newton Heath Copper Smelting Company, Manchester.
Muspratt Brothers and Huntley, Flint.
William Russell and Company, Newcastle.
The Bede Metal and Chemical Company, Jarrow, Newcastle.
W. Hunt and Sons, Leabrook, Wednesbury.
William Hunt, Brother, and Co., Castleford.
Harrison, Blair, and Company, Kearsley, Bolton, Lancashire.
Henderson and Company, Irvine.
H. Hills and Sons, Newcastle.
Eyton Copper Company, Mostyn.
Morris and Company, Doncaster.
W. D. Pochin and Company, Newcastle.
South Devon Metal and Chemical Company, South Down, Devonport.
H. G. Lord and Company, Calstock.
Holmbush and Kelly Bray Company, Callington.
Gibbs, Jackson, and Company, Newcastle.

ARSENIC.

Cornwall Arsenic Company, Hayle and Bissoe Bridge, Thomas Willis Field, Managing Partner, Marazion, Cornwall.
Devon Great Consols Mining Company (Limited), Tavistock.
J. B. Drayton and Company, Harrowbarrow, Callington.
English Arsenic Company, Roseworthy, Gwinear, Cornwall.
Palmer and Hall, Morriston, Swansea.
A. C. Hadland, Swansea.
Plympton Mining and Arsenical Company (Limited).
Okel Tor Arsenic Works, Calstock.
J. Paynter and Trythall, Bissoe Chemical Works, Devoran, Truro.

BARYTES MANUFACTURERS.

Blackwell, George G., Garston, Liverpool.
Pegg, Harper, and Company, Derby.
Ellam, Jones, and Company, Derby.
Stevens Brothers, Matlock Bath.
C. H. Garton, Lumsdale, Matlock Bridge.
Wm. Hawley, Bonsall, near Matlock Bath.
E. Brown, Bonsall, near Matlock Bath.
Hegginbotham, Stoney Middleton, near Sheffield and Whaley Bridge.
Middleton Dale Barytes Company, Stoney Middleton, near Sheffield.
White and Company, Chapel-en-le-Frith, near Stockport.

NICKEL AND COBALT.

H. Hussey Vivian, M.P., Swansea.
Stephen H. Barker, Birmingham.
Henry Wiggin and Company, Birmingham.
W. Webb and Company, Aston, near Birmingham.
Sir J. Mason, Bromford, Birmingham.
J. H. Williamson, Stoke-upon-Trent.
Rawlins and Son, Liverpool.

GOLD AND SILVER REFINERS.

Vivian and Sons, Swansea.
Johnson, Mathey, and Company, London.
Brown and Wingrove, Wood street, Cheapside.
M. Rothschild and Co., Royal Mint Refinery.

SILVER ORE SMELTERS.

Vivian and Sons, Swansea.
Nevill, Druce, and Company, Llanelly.
Raphael and Company, Thomas street, Limehouse.
Sheffield Smelting Company, Sheffield.
E. W. Oates and Co., Sheffield.

THE COAL TRADE.

Mr. J. R. Scott, the Registrar of the London Coal Market, has published the following statistics of imports and exports of coals into and from the port and district of London, by sea, railway, and canal, during August, 1881:—

IMPORTS.

By Sea.	Ships.	Tons.	By Railway and Canal.	Tons	cwt.
Newcastle	118	132,447	Lond. & North-Western.	125,405	9
Sunderland	85	58,916	Great Northern	89,298	0
Seaham	38	22,379	Great Western	76,183	0
Hartlepool	55	23,059	Midland	161,005	0
Middlesborough	5	3,853	Great Eastern	45,148	10
Scotch	13	5,746	South-Western	5,738	11
Welsh	34	30,470	South-Eastern	1,582	8
Yorkshire	21	2,667	Grand Junction Canal	710	10
Small coal & cinders	13	5,721			
Colonial	13	892			
Total	425	286,150	Total	505,071	8
Imports—Aug., 1880	427	272,163	Imports—Aug., 1880	449,723	12

Comparative Statement, 1880 *and* 1881.

By Sea.	Ships.	Tons.	By Railway and Canal.	Tons	c.
Jan. 1 to Aug. 31, 1881	3318	2,391,800	Jan. 1 to Aug. 31, 1881	4,203,596	13
Jan. 1 to Aug. 31, 1880	3417	2,323,878	Jan. 1 to Aug. 31, 1880	3,925,247	6
Increase—1881	—	67,922	Increase—1881	278,349	7
Decrease—1881	97	—			

EXPORTS.

Railway-borne coal passing "in transitu" through district—Tons		92,416
Sea-borne coal exported to British Possessions, or to foreign parts, or to the coast	64,545	
Ditto sent beyond limits by railway	18,606	
Ditto by canal and inland navigation	2,193 =	85,834
Railway-borne coal exported to British Possessions, or to foreign parts, or the coast	32,143	
Ditto, by canal and inland navigation	269 =	32,412
Sea-borne coal brought into port and exported in same ships		1,283
Total quantity of coal conveyed beyond limits of coal duty district during August, 1881		211,460
Ditto, during August, 1880		177,229

Comparative Statement, 1880 *and* 1881.

Total distribution of coal from Jan. 1 to Aug. 31, 1881	1,743,171
Total distribution of coal from Jan. 1 to Aug. 31, 1880	1,554,203
Increase in the present year	188,968

General Statement, 1880 *and* 1881.

Increase in coals imported by sea	67,922	
Increase in coals imported by railway	278,349 =	346,271
Deduct increase in coals exported		188,968
Total increase in trade within the London district—1881		157,303

THE VAN MINES—MONTHLY REPORT.

Sept. 15.—Herewith I beg to hand you my monthly report:—At the present end of the 120 west we have crossed north 9 ft., and I am glad to be able to inform you that the lode has improved in appearance upon the last cross-cut. We have intersected several branches or ribs of lead, and the lode is worth, so far as we have gone, about 2 tons per fathom. The Bastard lode, in which the level is driven, is at present worth 35 cwts. per fathom. As soon as we have reached the footwall in the cross-cut north we shall cross south to the flookan. The winze sinking below the 105 west, in advance of the 120, is down 6 fms. This is sinking by the side of the main lode, but we are having occasionally good stones of lead. The ground in the 15 east continues to improve, and is becomsng more like the character where in the deep adit the ore ground was first discovered.—Van Hill: We are driving upon a very kindly lode, well defined walls, and letting out water freely, showing now and then good spots of lead. I have the men this week laying down a tramroad for the purpose of bringing their stuff to surface. Hitherto we have been packing it in the old cross-cuts, but have filled them all up. The only change in the stopes is a slight falling off in one section of the 90 fm. stopes, but we hope by-and-bye to get into more productive ground again.—Surface: At surface everything is going on regularly. Our produce this month, the sale of which takes place to-day, is 200 tons lead and 100 tons blende. We are pushing on the corn harvest as rapidly as the weather permits.—W. H. WILLIAMS.

GREAT POLGOOTH UNITED MINES.—There are two reports upon this company's mines this week, one from Mr. David Cock, M.E., of St. Austell, and one from the agent of the mines (Capt. Richards). That of the former has been made at the request of a shareholder, and is of a satisfactory character. A large amount of work has been done on surface since the company was formed. No time will be lost in erecting the machinery and getting the mine in full work, when, judging from the past history of the mines, and the reports of those engineers who have lately inspected them, the returns can hardly fail to be of a profitable character.

HEATING FURNACES WITH COAL DUST.—An apparatus by which coal dust and other pulverised fuel can be efficiently and economically utilised for the heating of metallurgical and certain other furnaces, has been invented by Mr. G. M. THOMSON, of Paris. The apparatus in question is composed of a hopper through which the pulverised fuel falls upon a horizontal shaft provided with worms or screw blades working in opposite directions from the centre, the said shaft being operated by any convenient motor. By these worms the fuel is carried into funnels beneath each end of the hopper, whence it falls into air pipes, in which after being thoroughly mixed with atmospheric air it is blown into a combustion chamber, where it it instantaneously ignited and entirely consumed. The amount of air required to effect perfect combustion is regulated by suitable registers, and the admission of the fuel is controlled by a pulley set on the worm shaft, the uniformity of the feed being secured by agitators set upon a longitudinal shaft, which passing through the hopper from end to end is rotated by suitable gearing. The form, dimensions, and general details of construction of the apparatus may be varied according to its intended application.

The Stock Exchange Committee have appointed a special settling day in the following securities:—Kimberley North Block Diamond Mining Company, Limited, shares, quotation deferred; Wentworth Gold Mining and Indian Estates Company, Limited, shares, quotation deferred; Magellan Gold Mines, Limited, first issue of 40,000 1*l*. shares. The Committee have ordered the following securities to be quoted:—Central Jagersfontein Diamond Mining Company, Limited, shares; Cantarara Water Supply and Drainage Company of San Paulo, scrip and paid-up scrip.

The Stock Exchange Committee have appointed Tuesday a special settling day in the following securities:—Dingley Dell Estates and Gold Mining Company (Limited) shares, quotation refused The Committee have ordered the following to be quoted in the official list:—Russia Copper Company (Limited), 30,000 10*l*. shares. The Committee have also refused a quotation to the Rara Fortuna Silver Mining Company (Limited), shares.

LEAD ORES.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
Sept. 10	Court Grange	12 2 3	£12 18 0	Nevill, Druce, and Co.
13	Grogwinion	70	9 2 0	Weston and Son.
15	Van	80	10 8 6	Walker, Parker, & Co.
—	ditto	40	10 10 6	Panther Lead Co.
—	ditto	40	10 8 0	ditto
—	ditto	40	10 10 0	ditto

BLENDE.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
Sept. 15	Van	100	£ 2 3 0	J. F. Kimmel.

Mining Correspondence.

BRITISH MINES.

ASSHETON UNITED.—J. Garland, Sept. 14: The following are the particulars of work done in the month ending on Saturday last:—The 72, west of boundary shaft, was driven 5 fms. 5 ft. 2 in., the ground having been unusually favourable for progress, and the lode was exceptionally small, and wihtout ore of any kind: at present the ground is a little harder, and the lode is about 1 ft. wide, consisting of soft killas. The rise in the 70 west was put up 3 fms., the part of the lode being carried is 3 ft. wide, looking very promising, and yielding about 1 ton of lead ore per fathom. At the footway rise the stopes under the 40 west are yielding well; that west of the rise gives about 15 cwts. of lead ore per fathom, that east of the rise has improved to 2½ tons to the fathom; west, 3 fms. 0 ft. 4 in. has been stoped; east, 2 fms. 1 ft. 6 in. To ventilate a valuable pitch in the 60, west of Hunt's cross-cut, a rise is being put in the 60, and fair progress is being made, 2 fms. 4 ft. 7 in. being the present height. In the 60, east of boundary shaft, the lode has been cut through to the footwall, exposing a hard quartz lode 4 to 5 ft. wide, containing a little blende and lead ore. We have five tribute pitches working by 13 men and boys, and yielding fairly well. The pumping and winding machinery is in good order, and our consumption of coal is comparatively small.

BEDFORD UNITED.—R. Goldsworthy, Sept. 14: The lode in the 127 east is still unproductive. The lode in the 115 east has been taken down, and is producing good stones of ore of a more promising appearance than for some time past.—Bridge Lode: There is no alteration in the 20, east or west, nor in M'Callan's engine shaft, to call for any special remark since my last report.

BLACKBURN BANKS AND GILDERDALE.—Christopher Irving, Sept. 15: We have extended our cross-cut from the 10 north, and have intersected the east and west lode, from which I forward you a sample out of this lode. It is grey ore, you will see; what we call cat-teeth ore here—rich ore. The ore is going both up and down the cross-cut, and improves as we sink on its course. We have only as yet cut the north cheek; when we get to the Sun cheek I expect the ore will be better still. We shall push on our sinking and extend our levels east and west, as we have such bright prospects before us. We have cut the lode in the great limestone sill—the most productive stratum for mineral in this district, and in which all our rich lead mines have invariably made ore in abundance. Our deep adit level, driven 176 fms., will on further driving of about 30 fms., intersect the lode at a depth of 60 fms. under our present 10 fm. level, and at such intersection we may reasonably expect a permanent dividend mine, as we shall also intersect other lodes in driving this deep level at 70 to 80 fms. from surface, all of which lodes have proved rich and productive in the neighbouring mines.

BLUE HILLS.—S. Bennetts, R. Harris, Sept. 10: The 80 east end is slight improving for tin, and the two parts of the lode continue to approach each other. The 42 east end, on the north lode, is worth 7*l*. per fathom, and the 30 east end 15*l*. per fathom.

BODIDRIS.—H. Hotchkiss, Sept. 14: The end of our working month being Saturday last, I measured up and re-let for the ensuing month. The 60 yards level to drive east upon the Maes-y-Pwll lode, by 4 men, at 16s. per fathom. This end is rather poor for lead ore just at present, but I expect a favourable change to take place here daily. About 6 fms. back from said end I have four men at work underneath this level breaking lead ore. The lode is from 7 to 8 ft. wide, a fine promising-looking lode, with good leaders of lead ore in places; let at 120s. per cubic fathom.

BWLCH UNITED.—William Northey, Sept. 14: On Saturday last, our usual setting day, we re-set the following bargains:—To drive the 50 east, by four men, at 5*l*. 7s. 6d. per fathom, the men to tram their own stuff; the lode is about 2 ft. wide, composed of light blue killas, intermixed with ribs of quartz, charged with sulphur, and occasionally spots of lead ore. No. 1 stope in the back of the 12 under adit was re-set to six men, at 2*l*. 10s. per fathom, for the month, the men to wheel their own stuff to the 30; the lode will yield its usual quantity of lead ore, being worth 15 cwts. per fathom. No. 2 stope in the back of the same level is re-set to six men, at 4*l*. per fathom, to rise an incline west, and at 2*l*. 10s. per fathom to stope in back of the same for the month, the men to wheel their own stuff; the lode will yield about 13 cwts. lead ore per fathom. To drive Marvin's lode (15 fms. under adit) east, by two men, at 4*l*. 10s. per fathom, the men to clear their own stuff; the lode is 1 ft. wide, composed of friable quartz and good stones of lead ore. The 15 west is re-set to four men to cut out lode to its full width, at 1*l*. 15s. per fathom. To stope in back of the same, at 2*l*. 15s. per fm. the men to clear their own stuff. Tribute pitch on the same lode is re-set to two men, at 7*l*. 10s. per ton, delivered clear in the bin.—Surface Work: The new jigging machine and dressing machinery throughout are working well, and at full speed. The carpenters are preparing timber for the erection of a new line of pulley stands to the old engine-shaft to draw the orestuff from Marvin's lode, and the labourers are cutting ground for new railroad to tram the same to the top floors. The pumping machinery is in good order, and working well.

CALLINGTON CONSOLS.—T. Gregory, Sept. 13: The lode in the 45 east is improved to 3½ and 5 tons of good ore per fathom. A portion of the lode is still standing to the south, and will be cut into as soon as the men are able to do so; there is no drivage over or under this important discovery yet, all standing in virgin ground. We are driving by the side of the lode in the 45 west, consequently there is no change to report. The engine-shaft is going down rapidly for the 60, where we may fairly expect good results.

CARNARVON COPPER.—J. Roberts, W. Darby, Sept. 13: During the week the 90 end has further improved, and is at present worth ½ ton of ore per fathom. The ground is more favourable for driving, and there is much water streaming from the end. The stopes between the 80 and 90, continue to maintain their value, eastern stope worth 3½ tons of ore per fathom; western stope worth 4½ tons per fathom. There is no change to notice in the rise at the 90, which continues much the same value, worth about 7*l*. per fathom. We are busy dressing and carting the ore down to the station.

CATHEDRAL CONSOLS.—S. Davey, S. Davey, jun., Sept. 14; Engine-Shaft: This shaft is cleared of refuse to the bottom, dividing and casing, with all other permanent timbering replaced, and the shaftmen are now engaged driving the 60, east and west; the lode is 3 ft. wide, producing a little copper ore.—Lawry's Shaft: This will be completed to the adit by the end of this week, and where the lode is 6 ft. wide, composed of gossan, fluor-spar, and quartz. The old miners in the neighbourhood report to us that good branches of tin are to be found at this depth, and in confirmation of this we find good stones of tin coming up from this shaft in the attle or deads; as soon as the adit level is reached we shall at once prosecute our researches for the said tin lodes.

D'ERESBY MOUNTAIN.—J. Roberts, Wm. Sandoe, Sept. 14: The No. 6 end, driving on the heading side of the lode, is looking to-day just the same in value for lead as it has done through the month, worth about 2½ tons per fathom. But with regard to the value of the lode we consider it has very much improved, and we have stronger reason to expect a larger bunch of lead than we have yet had. The horse of disordered rock that we had near the footwall in the beginning of the month has entirely disappeared in the bottom of the end, and instead there is a fine matrix of carbonate of lime, with large vughs and lead about them and in them. We consider these are very important indications, and especially as we are now just under the point where the old men had the large course of lead at Nos. 4 and 5. The stopes behind the end are worth about 1 ton of lead to the fathom, but as yet we have not opened ground enough on them to have a very great advantage for breaking a large quantity of stuff. The stopes at No. 5 have not turned out through the month as we had expected, but there is an improvement in them this week, and we fully expect the result will be better this month. We have a tribute pitch working in the level by Harker's Cottage, between Nos. 4 and 3 levels, by two men, at 6*l*. per ton, and they have a very nice branch of ore. There is a large run of kindly ground about this neighbourhood, and could we get tributers to work it, as there are in many mines, there is no doubt that it would do well. We did think that we should have had 30 tons of lead in the bin about this time, but owing to the stopes at No. 5 not having turned out as we expected it will take us another fortnight.

DENBIGHSHIRE CONSOLIDATED.—R. Prince, A. Francis, Sept. 15: In the lode out of the north cross-cut the same favourable features continue as reported in my last, and the stope below the level yields as for some time past—1 ton of lead per fathom. No. 2 rise is also worth 1 ton of lead per fm. In the sump below the level in the 112 east the lode is opening out in a very satisfactory manner, and is now worth from 25 to 30 cwts. of lead per fm. The width of the vein is quite 2 ft., and some of the rocks of ore weigh weigh from ½ to 1 cwt. each. There can be no question that this course of ore will prove of a lasting character. We have weighed into the lead-house to-day 10½ tons of lead, and are busy dressing.

DEVON FRIENDSHIP.—C. Thomas and Son, Sept. 14: The lode in the adit end east is 3 to 4 ft. wide, and produces 6 tons of arsenical mundic per fathom. The stopes continue to yield the usual quantities of arsenic. We have sold 50 tons of arsenic by tender, and shall get another parcel of tin ready for sale early in next month. The axle of the water-wheel with centre pieces attached is placed in position on the pit, and the builders are proceeding as fast as possible with the wood-work. We hope to complete the wheel in about three weeks.

DEVON GREAT CONSOLS.—Isaac Richards, Sept. 15: Wheal Josiah: In the 144, east of the Count House shaft, on the new south lode, the lode is 5 ft. wide, composed of capel, quartz, peach, and some small quantities of copper and mundic ores.—Wheal Emma: Inclined Shaft: In the 137 a small cross-coorse, about 6 in. wide, has been intersected, which has displaced the lode, probably, to the left or north, and the drivage is turned in that direction for proof of same.—New Shaft—New South Lode: In the 115 east the lode is 3 ft. wide, composed of capel, quartz, peach, mundic, and a little copper ore. In the rise (Burgoyne's) in back of the 130 east the lode is 3 ft. wide, worth 4 tons of copper ore and 2 tons of mundic per fm.—Railway Shaft: In Bray's cross-cut north, in the 205, the grornd is mineralised, and from its general appearance the lode cannot be far off. In the 190 west the driving is being carried by the side of the lode for more speedy progress. In the 175 west, on the south part of the lode, the lode is 5 ft. wide, worth 4 tons of copper ore and 2 tons of mundic per fm. In Bray's rise, in back of the 175 west, on the south part of the lode, the lode is from 5 to 6 ft. wide, worth 4 tons of copper ore and 3 tons of mundic per fm. In the 160 west, on the south part of the lode, the lode is 2 ft. wide, of a promising character, and producing small quantities of copper and mundic ores. In Rich's winze, in bottom of the 160, on the south part of the lode, the lode is 5 ft. wide, worth 3 tons of copper ore and 3 tons of mundic per fm.—Watson's: In the cross-cut south, in the 88, the ground is tolerably favourable for progress, and congenial for mineral. In the western shaft the solid rock has not been reached. Our progress in sinking is very fair, 10 fms. below the surface having been reached.

DEVON GREAT UNITED.—Isaac Richards, Sept. 15: The men at Willesford's shaft are engaged re-fixing the lift between the 93 and the 104, which will occupy about a week to accomplish, after which the sinking of the shaft will again be resumed. In the 60, west of Willesford's shaft on the Capel Tor lode, the lode is 3½ ft. wide, of a very promising character, worth 1 ton of copper ore and 2 tons of mundic per fathom. In the 60, west of Watson's shaft in the Capel Tor lode, the lode is 2½ ft. wide, composed of capel, quartz, mundic, and a little good quality copper ore. In the 50, west of Watson's shaft, the lode is 2 ft. wide, and produces some good quality copper and mundic ores. In the cross-cut south at the 20 fm. level, east of Willesford's shaft, the ground continues favourable for progress.

DRAKE WALLS.—Moses Bawden, Sept. 15: We have not made the communication as yet between the adit and the old mine, but expect to do so by the end of this week, as from the indications at both points there cannot be much ground standing between. In the 60, which is being driven back west to communicate with Matthews' shaft, we are laying open some good tin ground, and

the branches are maintaining their good quality. As soon as the communication from the adit is made we shall as quickly as possible bring the rock-drill to bear on the 60 west, to make that level good to Matthews' shaft, on the south branches. The necessary repairs are being got on with as fast as the nature of the work will admit.

DUCHY.—P. Argall, Sept. 10: There is no change to note in the 68 fm. level. The 60 fm. level is opening out some good blende ground. The stopes over this level are improving for blende. There is nothing new in any of the other stopes or levels.

EAST CHILLATON (Manganese).—W. Doidge, Sept. 13: In the cross-cut driving south we have cut a branch 15 in. wide, composed of capel, spar, and manganese. We cannot have much further to drive to cut the south lode. In the eastern end there is no change since I last wrote, but we expect every day to be able to report improvement.

EAST CHIVERTON.—R. Southey, Sept. 8: Since my last good progress has been made in the different departments, with the exception of fixing the new boiler to our pumping-engine, and that has been delayed a little for want of masons, but I am pleased to say a full staff will commence on it next Monday. All the materials for building are in readiness, and the engineer is doing his utmost to get it fixed as quickly as possible. The shaftmen are getting on very well in sinking for bearers of cistern, and when we get the standing-lift fixed a lump bargain will be set to put the shaft down to the 100. The 90 end west is the same as last reported on, and the stope in back of same level is equally good. We are also preparing the ground for a new steam-whim in order to get same completed by the time the shaft is down to the 100, when a new crusher will be attached, and our dressing-floors enlarged. In the meantime we shall have a good parcel of silver-lead ore for the market.

EAST DARREN.—T. Garland, Sept. 14: The lode in the 104 fm. level, driving west, on south lode, is 4 ft. wide; unproductive for ore. The lode in the 92, driving west, on south lode, is 18 in. wide, yielding stones of ore occasionally. The lode in the adit level east, on north part of lode, is 5 ft. wide, yielding about 12 cwts. of lead ore per fathom. The lode in the stope over the 92 west, on the south lode, is 3 ft. wide, yielding 10 cwts. of lead ore per fathom. The lode in the stope over the 92 east, on south lode, is 4 ft. wide, yielding 8 cwts. of lead ore per fathom. The lode in the stope over the 80 west, on south lode, is large, yielding from 6 to 7 cwts. of ore per fathom. Th lode in the stope over the 80, west of Taylor's shaft, is 2 ft. wide, yielding good saving work (a trial stope). The lode in the stope over the 56, east of Taylor's shaft, is large and soft, yielding 5 cwts. of ore per fathom. The lode in the pitch over the 92, opposite Taylor's shaft, is 3 ft. wide, yielding 8 cwts. of lead ore per fathom. I am very sorry to add that our stopes throughout the mine, on the whole, are looking poor, and ground becoming exhausted. Our trial at the adit level going east will be pushed forward with all vigour, in order to prove the run and value of the north part of the lode, which at present looks promising. The machinery throughout the mine is in good order; drawing and dressing progressing steadily.

EAST HERODSFOOT.—T. H. Bennett, Sept. 15: I am pleased to report that we have holed the air shaft, and the men who were engaged in the rise have again resumed the drivage south on Bèwes' lode. This communication we shall find a great advantage in prosecuting our drivage into the hill, and as our shaft measures from the surface to the back of the level 10 fms. 2 ft., we may safely reckon the hill to be many fathoms higher than at first anticipated, and into which on the course of the lode every effort will be made to proceed as judiciously as possible. I hope ere long to open up a productive lode.

EAST LONG RAKE.—H. B. Vercoe, Sept. 12: I have much pleasure in furnishing you with this fortnightly report, as the mine has very much improved. In the 50 west, on middle lode, we have still large cavities in the forebreast. These are surrounded with rich lead, besides loose boulders of lead in the cavities. I never saw a finer lode in my life, and am confident there is a long run of lead ground in this direction. The lode in the stope in roof of 50 west also looks very well. In places there is a rib of ore from 7 to 8 in. wide, quite solid. I look forward to getting large quantities of lead from this stope. In the 50 east there is no change worthy of remark. The enlarging of lodge at main shaft has been completed, and we have now ample space for storing stuff. I would again impress upon you the importance of commencing work from the bottom of the shaft (the 60 fm. level). This should be proceeded with at once, and I am certain it would soon result in a good discovery of ore. A skip-road should be fixed in the shaft, and a skip substituted for the kibble. This would enable us to wind much faster, and reduce the wear and tear of wire ropes, casing, &c., to a minimum. Dressing is proceeding, and we shall soon have a parcel of ore for the market.

EAST ROMAN GRAVELS.—Arthur Waters, Sept. 15: The 109 south of shaft is in a lode 3 ft. wide, spar, lead ore, and blende, worth ¾ ton of the one and 1 ton of the other mineral per fathom. The same level going north towards the boundary is in a lode 3 to 4 ft. wide, worth 2 tons lead ore per fathom. The 97, going south of shaft, is in a lode 2 ft. wide, at present not to value. The cross-cut west in this level has not yet discovered any more lode. The 97, north of the 86 winze, is in rather hard ground by the side of the lode. Three stopes in the back of the 86 have fallen off in value, now worth 2 tons per fathom. The compressor is on the mine, and the men are getting out foundation for loading, &c. The air pipes are fixed in the shaft from the 109 to surface—150 fathoms. All other surface work connected with machine jiggers, boiler, and so forth, is being pushed forward.

EAST UNY.—W. Hooper, Sept. 15: The 32 end, west on Davis lode, is improved for copper; the lode is 4 ft. wide; the north part is worth 2 tons of copper ore per fathom. The 70 end, west on No. 1 lode, is saving work for tin. The 70 end, west on No. 2 lode, is split at present with a cross-course. I have put two men to stope the bottom of the 50 fm. level west on the Great Flat lode; they have broken some rich tinstuff. I have set a pitch in the back of the 50 fm. level on the Great Flat lode to three men, at 10s. in the £. tribute.

EAST VAN.—W. H. Williams, Sept. 15: The lode in the driving at Glangwden Brook looks very encouraging; we shall start crossing north in a few days. At cross-cut E E we are still working in the forebreast; there is not quite so much water this week, but it continues to issue very strongly from over both sides of the cross cut. When we have got fairly through the lode—unless we get into something better—I shall put the men to drive eastwards towards the place where the lead was found at surface, and where I believe we shall come across another lode running north-east by south-west, which produced lead in the engine-shaft.

EAST WHEAL ROSE.—Thomas Doidge, Sept. 10: Penrose's shaft is cleared 5 fms. under the adit. In the last sink we made, which was in the engine end, we came upon the water, but under our feet there was some stuff and a lot of old timber. In putting back the stope toward the whim end we met with the casing and dividing, which is standing complete. We removed the sollar from the whim part and found water only. I dropped a plumb line down into the shaft over 50 fms. I may here point oat that for reasons hereafter named I let down the water at Strong's shaft. This let the water down at Penrose also, which enabled us to see some of the timber of shaft that was under water. I am pleased to say that it is firm and good, and from this we may expect to find the shaft good from this point down. The fact of being able to drop a line from the depth named from the shaft to be good, the stuff now in engine part that I have spoken of came from above, and caught across that part of shaft before it was sollared over. It cannot be much, as the shaft is firm and good, and the whim part of clear as proved by the plumb line. Since we met with the water the shaftmen are employed clearing adit from Penrose's towards Foster's. I hope to get it cleare I and timbered in a week. Andrew's shaft is cleared nearly to the depth of adit we have 3 ft. more to clear, when we shall start to clear the cross-cut which communicates with the adit. I have exp ained to you that the adit is not driven upon the lode that is in Andrews' shaft. The lead lode in the shaft is much the same in appearance as when I last advised you, and producing occasionally good stones of silver-lead. The iron lode is strong, but at present does not produce iron ore. The adit level we have cleared and timbered nearly into the cross-cut which communicates with Andrews' shaft.—North Wheal Rose: In clearing the level at Patten's and Strong's shafts we let down the water in the mine about 6 ft., the object being to let the water down at the engine-shaft; I am pleased to say we succeeded, and have cleared up the stuff in the shaft to the depth the water now is. We found the timber standing in its place, and I have put the shaftmen to put in the collar, which is now being done. Penrose engine-house is in a very forward state, the bob end is up to its height, and the three walls that go above this are not nearly so thick.—North Wheal Rose: In the engine-house very good progress has been made in the past fortnight, and the loding, though massive, is being built fast. The quarry and all other surface work is being pushed forward. The 100-inch cylinder engine is now being delivered on the mine.

GAWTON COPPER.—George Rowe, George Rowe, jun., Sept. 10: The lode in the 117 east is over 6 ft. wide, producing mundic and copper ore to the value of 14*l.* per fathom, with a very kindly appearance. The lode in the 105 east is improving in character, with mundic and ore, worth 15*l.* per fathom. The lode in the 95 east is also improving in character, yielding 4 tons of mundic and ore per fathom. Our progress in building the stack has been very satisfactory, but the past few days has not been so good for progress in consequence of heavy rain.

GLASGOW CARADON.—William Taylor, Wm. J. Taylor, Sept. 13: We are losing no time in pushing on the 114 cross-cut south; the ground is of the same c ngenial character for producing ore, but rather more troublesome for driving, hence the progress is not quite so good. We have not cut any of the branches passed through in the 102 cross-cut, probably they are dipping towards the south lode and will form a junction with it. If so, it will be important. We are watching this point with interest. In the 114 east on shaft the lode is about the same value; worth 5*l.* per fathom. We intend to open west on this lode. The ground in the 102 cross-cut continues hard. West of winze, in the bottom of the 90, worth 10*l.* per fathom. The new winze to come down on this end is worth 8*l.* per fathom. The stopes are worth 10*l.* per fathom. No alteration in the tribute pitches to notice. We sampled yesterday (computed) 140 tons of our usual quality copper ore, which will be sold on the 22nd inst.

GLENROY.—R. Rowe, Sept. 14: I have no change to report in the shaft sinking below the 122, still a wide lode, but unproductive. In the 108, driving north, the lode is quite 6 ft. wide, and about 1 ft. of this carries a nice mixture of lead and blende stuff. The stope in the roof of the 25 is worth 1 ton of lead and 1 ton of blende per fathom; the lode still tends to go north in whole ground.

GOODEVERE.—R. Knott, Sept. 14: We are making good progress with the lobby, and in the course of a day or so I shall be in readiness to commence building the stamps wheel-pit; we are now engaged in covering the upper part of it, which will give us more room, and will also enable us to lay out the dressing-floors more satisfactorily. The water is again out of the shaft, and we are urging on the sinking operations as fast as possible, so as to make the most of the finer weather; the lode is at present small, but continues to look very promising for an early improvement. There is no change in either of the cross-cuts calling for remark.

GORSEDD AND MERLLYN.—W. Edwards, Sept. 15: The 70 east, I am glad to say, is looking more favourable; there is a little lead and blende on the side of the vein. The men have driven two yards since last report. The 90 west still continues to look well and the lode is getting wider; at present it will turn out 26 cwts. of lead to the fathom.—50 West, South Driving: There is a change in this level, we have got into a feeder of water this morning right in the forebreast, and apparently there is a swallow before us, which I am very pleased to see, as it was after passing one that we had such a splendid course of lead ore. In No. 1 pitch in the roof of the 70 east the lead is worth 12 cwts. to the fathom; No. 2, 14 cwts.; and No. 3, 15. We are very busy dressing lead ore.

GREAT HOLWAY.—W. T. Harris, Sept. 15: Roskell's Shaft: In the 110 east the lode maintains its width and character; an increase of water issues from the forebreast, and the joints from the north side are more frequent, which, I think, are encouraging features. The lode in the west end is 3 ft. wide, containing carbonate of lime of promising character; fair progress is made. In the 80 cross-cut driving south a strong feed of water has been cut into, and some good specimens of blende obtained from a joint newly intersected; we continue driving for better results.—Brammock Shaft: No. 1 pitch in back of 60 is worth 10 cwts. of lead and 1½ ton blende per fathom. No. 2 pitch in back, north of No. 1, is worth 1 ton lead ore per fm., with good indications. No. 3 pitch is producing 8 cwts. lead and 1 ton blende per fathom.—Level Engine: In the 60 east the lode is improving, now producing 2½ tons lead ore and 1½ ton blende per fathom, and most encouraging for further improvements. No. 1 pitch in back is worth 1¼ ton lead and 1 ton blende per fathom; No. 2 pitch, 2 tons of blende and 10 cwt. lead ore per fathom. No. 5 pitch is worth 4 tons lead ore and 1½ tons blende per fathom.—Office Shaft: The lode in bottom of the 60 is 5 ft. wide, containiag lead and blende in paying quantities. Surface operations making usual progress, and in the dressing department very busy preparing for the next sampling. I expect on Saturday to announce to you a further valuable discovery at the 60 level engine

GREAT LAXEY.—W. H. Rowe, Sept. 13: No change of importance has taken place in any of the workings of the deep mine since last report. The lode is becoming stronger in the 235 end north, and improved for driving; we may, therefore, sooner expect to come up with the run of ore gone down in the level above. The intermediate driving and stopes are at present worth 13*l.* and 10*l.* per fathom. The winze and stope near the Welsh shaft continuing poor we are now about to prove the ground further south, as it is important to be quite satisfied whether this pipe of ore is holding down or not. The stope in roof is worth 15*l.* per fathom. Having driven nearly 3 fms. southward at the bottom of the winze in the 165 south we have discontinued it for the present, and started to drive northward, where there is open vughy ground, mixed through with ore, which I am inclined to think will lead to our discovering the best ore in this direction.—Dumbell's: The branch of blende continues in the 230 end north, and the lode of a promising character. The 215 end is very variable, and the improvement referred to in last report interrupted again by a small slide, disordering the lode for the present. Two stopes in roof of this level are each worth 40*l.* per fathom, and one, worked nearly to dead ground, 5*l.* per fathom. The winze in the 200 has fallen off in value to 15*l.* per fathom; in order to expedite the sinking, and being unusually wide, a part of the lode is being left on the hanging side. Very little alteration has taken place in the other workings throughout this part of the mine. The lode has further widened in the 85 end north, and latterly letting out water. The roof stope is still worth 65*l.* per fathom.

GREAT POLGOOTH UNITED.—W. Richards, Sept. 14: Since the commencement of operations in this mine we have cleared and secured in a substantial manner the deep adit level, on the old mine lode, 80 fms. east, and laid a tramway from the foot of the incline, and are still pushing on into the hill; driven a cross-cut south of this level 10 fms., and intersected a very productive side lode, also driven a cross-cut further east from this level, and intersected the great flat lode, which is about 5 ft. wide, of a most promising character, and producing occasionally good stones of tin; this must be regarded as an important feature for our future operations. Rag's shaft we have cleared up and well secured with timber 10 fms. below the surface, and cleared the cross-cut north to Rag's and Wheeler's lode, in all a distance of 90 fathoms. We have also cleared up and secured Wheeler's shaft 22 fathoms, and cleared 7 fathoms on Wheeler's lode east, where the lode, about 3 ft. wide, is of a very productive character, and as there is a large elvan-course that will intersect this lode about 30 fathoms east in virgin ground of our present working good results may be fairly anticipated. About 70 fathoms east we are sinking a new shaft on the course of the lode, which is now sunk about 6 fms.; here the lode is 4 ft. wide, regular, well defined, and good walls, producing average tinstuff, and still continues to improve: 100 fathoms further east we have sunk a No. 2 shaft, 15 fms. from the surface on a perpendicular lode, producing stones of tin; this lode will in great probability form a junction with Wheeler's lode about the 30, which should be noted as one of great importance. The men are engaged in cutting a plat, and will case and divide the shaft for further sinking; about 50 fms. north of this point we have a lode of a champion appearance from 4 to 5 ft. wide, possessing a splendid gossan back, overlying a large elvan-course of the finest description. We have sunk a shaft perpendicular 10 fathoms, and expect to intersect this lode at 12 to 14 fathoms at an early date, which will prove its size and general character. Further west, and north of Wheeler's lode, we have cleared up two shafts in old men's workings, about 10 fathoms each; these are on the run of a caunter lode. This lode will intersect Wheeler's near the great cross-course. We have extensively costeaned the surface of the sett adjoining the Mulvra estate, and find the backs of the lodes of the same character as those that have been so very profitable in the old mine. We have built offices, smiths' shop, carpenters' shop, material houses, &c., and excavated foundations for engine-house, stamps, &c. The masons will complete building the engine-house in about a fortnight, which will be in readiness to receive the 36-inch engine for stamping, which is already on the mine. We have cleaned and repaired our leats, and successfully brought a good supply of water to our water stamps, but for the present we are obliged to utilise it for hauling the stuff over the incline from the deep adit level. In consequence of our quarry being well opened up, and producing a good quality stone, we are enabled to push the surface works forward, and keep the men well supplied with building materials, and shall use every effort to have the engine in full work, which we hope to have in a very short time.

GREAT RETALLACK.—J. Harris, Sept. 10: The men have completed their bargains in stripping down the ground for a small plat, and they will commence fixing sleepers and bed-plank from the 53, so as to bring down the kibble to the 64 in a day or two. I have set the men to drive the 64 fm. level east for 9 ft. extent, as I am expecting a decided change in the character of the lode and ground within that distance. The lode in the end is more quartzy than it was ast week, showing about the same quantity of blende and lead.

GUNNISLAKE (CLITTERS).—W. Skewis, John C. Seccombe, Sept. 14: The men in the 224 west are put to rise in the back of this level; lode worth 10*l.* per fathom. The lode in the 200 west is producing good stones of yellow and grey copper ore, looking very promising for early improvement. No other change in the mine since last report.

GWYDYR AMALGAMATED.—J. Roberts, W. Sandoe, Sept. 14: Clementina: The north end at the 34 is still improving, and we have now good saving work from it. The south is about the same as we reported it last week. We shall tomorrow finish fixing the new lift from the 15 to the 34, we shall then push down the shaft to the next level without any further hindrance.—Aberllyn: We have no change to speak of here since last week. The winze at the No. 2 has good blende in one end of it, and the lode still very regular; the end is worth about 1½ ton of blende per fathom.

HINGSTON DOWN.—Thomas Richards, Sept. 14: The engine-shaft is now in regular course of sinking below the 12 fm. level, the lode in which produces occasional good stones of copper ore. In the 12, east of the engine-shaft, the lode is improving, and will at present produce some saving work for copper ore, and is promising further improvement. No. 1 lode, in the deep adit level, east of the south cross-cut, is without any important change.

KIT HILL GREAT CONSOLS.—Isaac Richards, Sept. 15: At the deep adit level our progress in driving continues very satisfactory, and our surface operations generally are progressing as fast as the nature of the work will admit.

LADY ASHBURTON.—J. Wilcocks, Sept. 15: Since my report of last week we have driven the level west on the course of the lodes about 2 fathoms to the intersection of the junction. The north underlie has very much improved, producing copper ore at or near the junction, yielding a produce of about 12 per cent. of metallic copper to the ton and from 20 to 30 ozs. of silver, together worth 12*l.* to 14*l.* per ton. This is undressed, and not prepared for the market; if properly prepared it would be worth more per ton. We shall continue this drivage as rapidly as possible, fully believing that as we advance west the two lodes will become one, increasing in the rich production of silver and copper. Our cross-cut level south from this lode, towards the other silver-bearing lode, is driven about 5 fathoms, and will be pushed forwörd with as much speed as possible, and I hope soon to report the cutting of a good lode. Referring again to our copper discovery in conjunction with No. 1 silver lode, it is only characteristic of what has been seen in the old and rich silver mines of Wheal Langford and East Cornwall, where I have been informed, copper ore was raised highly charged with silver, and sold at 40*l.* per ton. I will keep you advised of all further improvements. The engine and pitwork are in good working order.

LADY BERTHA UNITED.—Thomas Neill, Sept. 15: I am pleased to state the stopes throughout the mines are much the same as when last reported on, and producing mundic in abundance, and copper ore. The 53 end east is look ing much better both for mundic and copper. We are making very satisfactory progress in the clearing of the new shaft below the 30 and the clearing of the levels. We have sampled about 50 tons of good copper ore, and are busily engaged in dressing a large pile of mundic; the latter we can raise any amount of. The mines are looking exceedingly well.

LADYWELL.—Arthur Waters, Sept. 15: The lode in the adit forebreast, south of new shaft, is about 2 ft. wide, yielding small bits of lead ore, but not to value; the ground is rather hard at present, making against progress.

LEAD ERA.—J. A. Ede, Sept. 15: The men have resumed driving the eastern level; the ground is much the same—a strong flat measure that may any day reward us for our outlay. Captain J. Lloyd was underground on Tuesday, and he thought our prospects were most encouraging.

LEAD HILLS.—Arthur Waters, Sept. 15: Brown Vein: Gripp's adit, going north of Gleugoar shaft into the hill ground, shows a much better looking lode than for a long time past, and we hope to get into productive ground again shortly. The pitch in the back of the 30 south, by two men, at 90s. per ton, is worth 10 cwts. per fathom.—Hopeful Vein: The pitch above Gripp's, north of shaft, by four men, at 80s. per ton, is worth 22 cwts. per fathom.—Brown's Mine: Jeffrey's engine-shaft, sinking below the 85, is worth 10 cwts. per fathom, the lode being narrow at present. The 85, north of shaft, is in a strong quartz lode 6 ft. wide, but without ore to value. The same level going south is worth 12 cwts. per fathom. No. 1 stope in this level south is worth 35 cwts. per fm. No. 2 stope is worth 20 cwts. per fathom. The 70, going south of shaft, is at present not to value. The stope in the back of the level behind the forebreast is worth 25 cwts. per fathom. The trial winze in the 41, south on new discovery, is worth 35 cwts. per fathom. The 41, south of Cameron's winze towards Wilson's shaft, is worth 20 cwts. per fathom, and looks like improving again. The stope in the back of this level, on new run of ore, is worth 32 cwts. per fathom. The stope south of ditto, north of Brown's winze, is worth 90 cwts per fm. The stope in the same level south of the above winze is worth 110 cwts. per fathom. Wilson's shaft below the 20 is worth fully 30 cwts. per fathom. We shall soon be deep enough here for the 41. The stope below the 20, north of said shaft, is worth 40 cwts. per fathom. The 10, going south of Moffat's winze, is worth 50 cwts. per fathom. Gripp's level, south of the shaft, is still in the junction of Brown's with Dobie's lode, the end showing vein stuff 6 ft. wide, quartz, and stones of ore. A pitch above Gripp's, south of Jeffrey's shaft, by two men, at 90s. per ton, worth 12 cwts. per fathom.—Raik Vein: The stope below the 10, south of Watson's shaft, is worth 16 cwts. per fathom, and in soft ground. The winze below Gripp's, north of the above shaft, is in a strong quartz lode, but not to value. We are looking for an improvement here in depth. We are driving a cross-cut in this adit, west of Watson's, to prove the side of the lode beyond Raik vein proper.—Jeffrey's Vein: The No. 1 stope above the 10, north-west of junction, is worth 30 cwts, per fathom. The No. 2 stope is worth 14 cwts. per fathom. Two men are driving into the end of the old stope above Gripp's by way of trial; lode yielding stones of ore. Surface work going on fairly, and the improvements at smelting-house and elsewhere prove that the money was well spent on them.

LLANDEGLA.—H. Hotchkiss, Sept. 14: The 36 yards level, west of shaft, we have not yet got clear of the swallow, which was discovered here at the close of last week, but the lode is becoming more firm, and is to all appearance of great width; we are not able to carry the whole of the lode in this driving, but are continuing our present operations upon the footwall, where the lode has a very kindly appearance; let to drive by four men, at 21*s.* per fathom, for one month.

LOMAX.—W. Argall, Sept. 14: The lode is still disordered in the end on Tatie Pie lode, but we are getting more branches, and therefore hope for a good change soon. We are still sinking on the new lode, and shall be able to say more about it next week.

MELLANEAR.—J. Gilbert, Sept. 14: The 30 cross-cut, driving south of Gundry's shaft, is still in a beautiful elvan course, and we are making rapid progress in driving. There is no change in the 60 cross-cut driving south of the main lode west of Gundry's shaft. The driving continues mineralised, but hard for driving. The 70 cross-cut, driving north of main lode, is now extended 36 fms. from the main lode, and should be very near cutting the north lode. The lode in the 80, driving west of Gundry's shaft on the main lode, is 2 ft. wide, yielding some saving work for copper ore and occasional stones of lead and blende. The 90 cross-cut, driving north-west of Gundry's shaft, is in a good channel of ground for producing mineral, and we are daily expecting to cut the main part of the lode. The lode in the 110 driving, west of Gundry's shaft on south part of the lode is 4 ft. wide, yielding 2 tons of ore per fathom, but the ground is very wet and our progress is slow. The lode in the 110 driving, east of shaft on the main part of lode, is 6 ft. wide, yielding 2 tons of ore per fathom, which is mixed with a good deal of mundic and occasional stones of tin. We are pushing on the cross-cut in the 120 driving north of shaft to cut the lode as fast as possible, and we shall begin next week to case and divide the shaft from the 100 to the 120. The lode in the 110, driving west from the old engine-shaft, is split up and disordered, and we do not expect much change before we reach the cross-course which is about 8 fms. ahead. The lode in the 110, driving east from the old engine-shaft, is 5 ft. wide, yielding good stones of copper and tin ores, and presenting a very strong and promising appearance. The lode is 5 ft. wide in the winze in the bottom of the 90 west of Gundry's shaft, and yielding 4 tons of ore per fathom. This winze is down about 5 fms. below the level. The lode in the rise in the back of 110 west of Gundry's shaft is 4 ft. wide and yielding 2 tons of ore per fathom, and letting down a good deal of water.

MONYDD GORDDU.—Thomas Kemp, Sept. 14: Burnitt's engine-Shaft: The 46 end is extended west from cross-cut about 12 fms. The part of the lode carried by this driving has within the last few days become exceedingly hard, consequently the men are for the present making slow progress. The lode in the forebreast is composed of killas, calc, and brown spar, carrying a little lead ore. I propose extending this level from 6 to 9 ft. further, and should it not enter the first shoot of ore gone through the sole of the level over (the 34) I would suggest that a short cross-cut be driven north for proof of same. The 46 end, east of cross-cut, is of the same general composition as reported last week, chiefly killas and brown spar of a very loose nature, and good progress is being made. The north part of the lode carried in sinking the winze below the 34 is looking a little better, composed of killas and spar, intermixed with ore; no doubt by sinking a short distance further it will resume its former value. The lode in the 12 end, west of shaft, is composed of carbonate of lime and friable spar, of a very favourable description, at times showing a little ore. The different stopes throughout the mine are producing ore equal to last week's valuation. We sampled on Thursday last 20 tons of blende, for which tenders will be due at the office on the 16th inst. We shall also forward 10 tons of silver-lead ore to Messrs. Goodhart and Co. in the early part of the coming week.

MORFA DU.—T. Mitchell, Sept. 14: The stope or pitch in the back of the 60 is turning out a fair quantity of bluestone, and the lode is beginning to open out wider as we extend from the rise recently holed to the winze from the level above. The lode in the 48 has opened out to 6 ft. wide, and the middle part of whice is mixed up with a kind of capel or blackstone, but on the whole it is yielding fairly well. The pitch in back of the 36 is now getting up a long distance from the level, and we shall soon have to see about getting a hole through to the level above, in order to facilitate the working of this ground; the lode here continues to look very well. The driving in the 20, near Ida shaft, has recently cut some good bluestone, and this place is improving, and likely to open out a good piece of bluestone ground.

MOSTYN CONSOLS.—John Woolcock, Sept. 15: We are making all possible speed to reach the north wall of the lode, and I am pleased to state that indications are most encouraging at this point. During the week we have met with a little clay and blende, which proves that we are not far off the wall The west level still yields good ore. The surface work is being proceeded with as fast as the nature of things will permit. The rods from the engine to the shaft are all fenced round, in order to comply with the Act, and we are now preparing house in which to store dressed ore. Machinery works well.

MOUNTS BAY CONSOLS.—Wm. Argall, Sept. 12: Trebarvah: We have thoroughly inspected this mine to the bottom or the 50 at the engine-shaft. The engine-shaft is a good sized one, in good condition, and pitwork working well. In the 10, 20, and 30 there are large quantities of white spathose iron ore laid open for stoping, and which can be made available if required. In the 30, west of engine-shaft, the lode is 2½ ft. wide, containing iron pyrites, oxide of iron, and a pretty natured quartz; we propose driving this level. The 40, west of engine-shaft, has been driven about 50 or 60 fms.; the lode in the present end is full 3 ft. wide, producing large slabs of iron pyrites, spathose, and quartz; there are several small branches of quartz falling into the lode; this end should be pushed on as fast as possible, as we expect an improvement shortly. About 20 fathoms behind this end, in the bottom of the 40, there is a good lode gone down about 2 ft. wide, and as far as we could see opened for 9 or 10 ft. long; it is worth 2 tons of good quality copper ore per fathom, for what length we could not then ascertain, but the backs above are all taken away for 8 or 10 fms. long, and we think it will run for that distance; this is a very important piece of ground, as there is no level under it, and we propose sinking a winze here as far as the water will allow us. The shaftmen are driving the 50, west of engine-shaft, now in about 2 fms.; the lode is 6 in. wide, producing iron pyrites and a congenial sugary quartz; we fancy there is more lode south. This end must be pushed forward rapidly to get under the ore ground from the 40, which is about 15 or 18 fms. ahead of us. In the back of the 50, between the engine-shaft and Richard's flat-rod shaft, there are two stopes—No. 1 about 5 fms. long; lode varying from 1 to 1½ ft. wide, which will produce 1½ ton of copper ore per fm. In No. 2 stope lode is from 6 to 8 in. wide, producing about 1 ton of copper ore per fathom. The bottom of the 50, about and west of Richard's shaft, has been stoped, but the water was not forked from this flat-rod shaft to the 60 fm. level, so that we could not ascertain to what depth it was worked; in a day or so we hope to get down to the bottom of the mine at this point, where the lode is reported to be worth 2 or 3 tons of ore per fathom. The 50 has been driven east of Richards's about 10 fms.; the lode in the end is 8 in. wide, hard and compact, and producing stones of yellow copper ore and iron pyrites. We propose to put nine men in the engine-shaft and sink to the 60, and then put out levels west and also east to meet the level west from Richards' shafts.—P.S.: Since writing the above the engine has forked to the 60 at Richards's shaft, and we have now to inform you that in the bottom of the 60, west of this shaft, the shaft and level have been stoped from 10 to 12 fms. long; as far as could be seen, for 3 fms. or 4 fms. long the lode is 1½ ft. wide, and worth full 2 tons of copper ore per fm. and the remainder is orey ground, but it must be cleared before a value can be given. The lode in the end west is a little disordered by a horse of killas. We must put six men to sink this shaft at once.

MOUNT CARBIS.—Wm. Tregay, G. Johns, Sept. 15: The engine is working very well. The water is down below the back of the 38, and we expect to get that level clear from water and the debris which has gone down the shaft by the end of this week. We have been clearing the 27, and expect to be in full work in that level by Monday morning next; the lode here is worth 50*l.* per fathom. The lode in the deep adit end is worth 20*l.* per fathom.

NEW BRONFLOYD.—Thomas Kemp, Sept. 15: No. 3 Shaft, North Lode: The men in the stope to the east of shaft over the 52 have since last report finished hauling their orestuff, and are now employed in running down attle from the level over the 40 in order to fill up workings to enable them to reach the ore ground where the lode is from 18 ft. to 22 ft. wide, and for that width is worth 18 cwts. of lead ore per cubic fathom; this stope is let on tribute to eight men for four months, at 130s. per ton, which includes filling up the workings, and to pay all charges in making the ore marketable.—No. 2 Shaft, Middle Lode: The lode in the tribute pitch over the 52 and to the west of shaft still continues to look very well, and is worth for the width (15 ft.) 18 cwts. of ore per cubic fm., in ground very hard for breaking; the take here does not expire before the end of the present month, when the men will commence to haul their stuff. I estimate the amount of ore broken here to be from 12 to 15 tons. The tribute pitch in the back of the 40 and to the west of shaft has become poor, and the men are employed in hauling their stuff. A tribute pitch to four men for two months in the back of the 73, to the west of Curtis's cross-cut, at 170s. per ton, the takers to pay all cost in making the ore marketable. During last week our crusher was idle, undergoing repairs. I am pleased to say it is again in good working order, and every effort will be made to pull up the lost time.

NEW KITTY.—W. Vivian, Sept. 15: We have not yet got clear of the cross-course in the 24 driving east, but a part of the lode is producing good stones of tin. In the 24 driving west the lode is about 2 ft. wide, and producing a little tin, but not to value. We are making good progress in sinking the engine-shaft below the 24.

NEW PENROSE.—J. Curtis, Sept. 13: We are making fair progress in driving west on the Trewavas copper lode, the ground being rather hard but showing signs of a change; there is more water coming out of it every foot we drive. No lode has been taken down for the past week. The engine-shaft is now cleared 7 fms. The men are securing the collar of it, and will commence clearing again in a day or two. I will send you a full report of the work done in the mine in a day or two.

NEW WEST CARADON.—N. Nichards, Sept. 14: There is no change to notice in the cross-cut driving south of Hallett's cross-course, in the 38. The lode in the 42, west of Hallett's cross-course, is of about the same value as when reported on last week, yielding 1 ton of copper ore per fm. The lode in this level, east of cross-course, will yield fully 1 ton of ore per fm., and likely to improve. The stope in the western end of the rise, in back of this level, will yield 2 tons of ore per fathom. We shall commence stoping the eastern end of this rise, where we have a good lode standing worth 3 tons of ore per fm, as soon as we have cleared the stuff below, which is being done with all possible dispatch. We are busy drawing the ore to surface, and all the dressing pares are at present busily engaged dressing the same.

NORTHERN LEAD.—T. Tonkin, Sept. 15: The tribute ground above the 42, west section, looks well in two places, and will yield while in its present condition 25 and 15 cwts. of ore respectively per fathom. Efforts will be made to obtain from this and other productive portions of the mine as much ore as possible. The 15 fm. level stopes are in easy ground, and yield about 8 cwts. of ore per fathom. The preliminary operations at Brandon Walls are being proceeded with as vigorously as possible, and when the needful materials come to hand no time will be lost in getting the water out of the mine and laying open the lode in the scar limestone and other locally productive sills. The weather is fine, and water for dressing abundant.

NORTH HERODSFOOT.—T. Trelease, Sept. 15: Our shaft is still dry and full of stuff; the lode appears to have crossed the shaft at this point, and we are now sinking through the old workings. The old timber has all failed, and we are obliged to put in all new. I am told the shaft is firmer below the 106, and I am hoping we shall find a clear shaft as soon as we get below the plat. The men are making very fair progress, considering the nature of the work. The lode in the 80 end is about 1 ft. 6 in. wide, composed of quartz and capel, yielding 6 cwts. of lead ore per fathom. The two stopes at this level continue to yield 8 and 6 cwts. of lead ore per fathom. The 50 end is still disordered and unproductive. We have gone through another small slide in the past week, and the ground has become somewhat easier for driving, and letting out a little more water, which I think is a favourable indication of an improvement shortly. The stope in back of this level continues to yield 12 cwts. of lead ore per fathom. The engineers have fixed the crusher, and the carpenter will lay the flooring at once. We have also got up the loading and bed for the vertical engine this week, and shall fix the same as soon as we can get the steam-pipes from the foundry.

NORTH D'ERESBY MOUNTAIN.—R. H. Vivian, Sept. 15: We have commenced cross-cutting the lode at the bottom of the shaft. What we have broken shows lead and blende all through, but as very little as very little has yet been done I shall be better able to give you its value for lead ore by this time next week. We have a very encouraging end driving north-east, quite as good now as on any former occasion.

NORTH PENSTRUTHAL.—Stephen Davey, William Polkinghorne, Sept. 14: Highburrow Shaft: The shaftmen are making good progress with sinking the shaft, cutting plat, &c., below the 120. The lode in the 120, driving west of shaft, is 5 ft. wide (the part commenced), producing a little tin and occasional rtones of copper ore. The same remark will also apply to the end driving east at this level. We have suspended the driving of the 108, east on Highburrow lode, for the present. The lode in the 108, driving west on the No. 1 lode, is 5 ft. wide, producing a little tin, and presenting a better appearance than for some time past, also letting out water freely, which we consider a good indication. The lode in the 108, driving east on No. 2, is 5 ft. wide, composed of chloride and mundic principally, with a small percentage of copper. The lode in the 88, driving west of shaft, is 3½ ft. wide, but at present poor. We have suspended the driving of the 74 west, and put the men to sink a winze below the level. There is no change to report in the 53 cross-cut north.—Ward's Lode: The lode in the winze sinking below the adit level is worth for tin 6*l*. per fm. We have commenced to drive a cross-cut south to cut Ward's lode and unwater the winze. This we expect will open a good piece of stoping ground.

OKEL TOR.—H. Bulford, John Rodda, Sept. 15: Nothing new to report. All points looking exceedingly well. The new shaft east is going down rapidly.

OLD GUNNISLAKE.—W. Skewis, A. J. Seccombe, Sept. 15: The driving of the deep adit is progressing at the rate of about 17 fms. per month; at present the drivage is on the side of the lode; shall speak more particularly of the lode in our next report. The granite looks very favourable for the production of copper when the lode is cut into.

PANDORA.—H. Nottingham, Sept. 14: Engine-shaft sinking below 45. We are making steady progress in sinking. The lode is still 10 ft. wide, but not so productive as it has been. We are in a poor bed of ground at present, but expect to see better lead again after sinking through this. The 45 driving south is opening up a good lode, worth 1½ ton of lead and 1 ton of blende to a fathom. The stope in back of this level is worth 2 tons of lead to a fathom. The stope north of shaft is worth 25 cwts. of lead and 1 ton of blende to a fathom. The No. 1 winze sinking under the 33 is going down in a good course of ore, worth together 2 tons of lead and 1½ ton of blende to a fathom.—Surface: Dressing is going on with fair speed, and we are keeping the crusher well supplied with stuff. We have one of the new round buddles just finished, and will in a day or two try over some of the slimes which have accumulated round the lower catch-pits.

I hope to have some tons of slime monthly from these heaps when once we are in regular course of dressing with these new buddles, but as we have never dressed any of this stuff we can hardly say how much it will produce.

PANT-Y-MWYN.—Enoch Parry, Sept. 15: But little has been done in driving the 22 since this day week, for we have put the men to push on the cross-cut into the north side of that level, and otherwise prove the width and character of the lode, so as to see which will be the best part to drive the level forward on. We find a great deal of clay in both sides of the level, and a strong, flat bed of black shale and clay at bottom of the level. It has been in connection with these shale beds and clay that strong runs of lead ore have been found, both in this mine and in the old Pant-y-Mwyn Mine. Some lody stuff is being met with daily in the said cross-cut, and we shall continue it on until we get into clean limestone.

PARYS.—T. Mitchell, Sept. 14: The ground in the 90 cross-cut south consists of light chert, with small strings of copper ore and sulphur intermixed, similar in character to the chert rock seen about the open east. Good progress is now being made in the driving with rock drills. The 90, west of cross-cut, on No. 1 lode, is looking very promising; it will produce about 1 ton of good copper ore in a fathom, and has every appearance of further improving. The 90, west of cross-cut, on No. 2, has a very nice appearance, and will yield near 3 tons of copper ore per fathom; some of the ore is of good quality, and the lode is opening out wider. The 90, east of cross-course, on the Carreg-y-Doll lode, continues to yield about 1½ ton of copper ore per fathom, and we are expecting this place will improve as we advance. The lode is looking more promising. Nothing of any importance has been done in this lode below the 45 in this direction, and we have a good chance for opening upa productive piece of ground at this level. The tribute pitches are looking much as usual. We are getting on very well with cleaning up the precipitation pits, and are likely to have a good lot of precipitate this time.

PELYN WOOD.—Sept. 15: Our prospects are good, No. 1 caunter lode presenting equally as good an appearance and value as last week. Its size and characteristics are a very important and encouraging feature, because as we proceed, as near as we can guess, within the next 25 fms., this lode will form a junction with one of the three east and west lodes ahead of this drivage and within the sett; and, being embedded within such a beautiful strata, I see no reason whatever why the junction here should not be equal (being in the same geological position) as the celebrated Lanliscon Mine. At No. 2 caunter lode we have been fixing timber and preparing outlet. The lode, although small, assumes a very encouraging appearance.

PENHALE AND BARTON.—James Evans, Sept. 14: The 20 cross-cut driving north towards Barton No. 1 lode is being driven with all possible speed in a beautiful channel of ground, with branches crossing every few feet. The lode in the north-east cross-cut is rich in tin and copper, specimens of which I have sent you on to-day, from which, I have no doubt, you will be thoroughly satisfied that it is a valuable discovery. The stope in the back of the 20 is now secured, and there is a magnificent lode, specimens of which I also send you, so that you can judge for yourself of its value. Next week I shall commence to stope on these two lodes, when I have not the slightest doubt but good results will follow. The Albert shaft is cleared and secured to the 10. The Barton shaft is cleared and secured 7 fms. below the adit level, and the water is still going down as we drain Penhale. The shaft was sunk on the Barton No. 2 lode, and it is plain the former workers must have had a splendid lode here, and that they only took away the richest portion of it, as we find in enlarging the shaft good tinstone in the walls of the lode. We have had a let in our engine by the dropping out of a pin from the steam valve; luckily we had no serious breakage, but it has caused a delay of 12 hours. It is now, however, working well; but had it not been for this delay, I should have had the pleasure of reporting that the water is in fork to the 30; but I am pleased to say the water is drained to the back of the 30, and I have every reason to believe that I shall have to announce to you in my next report that we are driving the 30 end east towards the course of tin gone down in the 20. Here I am confident that in 7 or 8 fms. driving a valuable discovery will be made, and as soon as the Albert shaft is cleared and secured to the 30 I shall set several men to stope in the back and at the bottom of this level. The stamps will be set to work early in the coming week, and by this day month you may rest assured that I shall send on a very satisfactory tin bill.

PENHALLS.—S. Bennetts, R. Harris, Sept. 10: The rise in the 70 east is nearly up to the 60, and will be holed in the course of a few days. The 60 east end is worth 5*l*. per fm. The 55 east end has improved since the junction of the two parts of the lode has been reached, and is now worth 10*l*. per fm. The 50 west is poor; and the 45 west is worth 6*l*. per fm.

PENNANT.—Sept. 15: In the 40 east we continue to pass through strings or branches of lode dropping across; each of these branches contain lead and blende, mixed with sulphate of barytes. We are confident of finding here a rich body of metal. All other work is going on in an exceedingly satisfactory manner. The alterations we are making on the floors (which I hope to complete next week) will be of great importance and value to us in the future.

PEN-YR-ORSEDD.—G. Bellis, R. Prince, Sept. 15: In our driving west out of the 150 north cross-cut, on the middle lode (which is under the shale lode), we shall soon be on the best bearing strata of the shale lode. The ground is of the most promising character, there being no fewer than four ribs of spar, varying from 2 to 3 in. in width in the forebreast. Undoubtedly these will come together when we have driven a few yards further, when the best results may be expected. Already we notice small specks of lead deposited in the spar. The 150 south cross-cut presents a very kindly appearance. The fresh bed of limestone which we are entering is of a lightish brown crystalline character, congenial for deposits of lead, nearly free from chert, and containing patches of nice spar.

PIONEER.—H. B. Vercoe, Sept. 15: Silver-Lead Mines, Holywell: In handing you my weekly report I am very pleased to be able to state that the mine has very much improved.—Bessie's Shaft: In the 40 yard level, drivnig north on flat, we have just struck into what appears to be a very rich deposit of ore, and within the last few hours we have broken from the forebreast fully 2 tons of splendid lumps of galena, some of them upwards of 5 cwts. each, and the end now shows a splendid sight, full of lumps of lead for 4 ft. in width, and leaving rich ore in the roof and sole of the level. This I regard as a discovery of great importance, as you have a long tract of unexplored ground in this direction, and if the flat continues its present productiveness thousands of tons of lead will be raised from it before reaching the boundary. There has not been much done in the 40 south since my last report, as the men have been employed some of them in the north level, and the others on the dressing-floors.—New Shaft: Fair progress is being made in sinking, and the character of the stratum has improved, and produces occasional lumps of lead.—Blackwell Shaft: In the 100 yard level west at cross-cut we have a most promising lode, composed of carbonate of lime, quartz, and clay, with occasional boulders of limestone spotted with lead. I am as sanguine as ever that these workings will shortly open into a good course of lead, the indications being everything that one could wish to see to promote the growth of lead ore in quantity.—Engine-shaft: I regret to say we have not yet succeeded in completing the pumping works below the 60, having had two hindrances this week. The starting-valve of engine broke and had to be repaired, and afterwards the large water barrel caught in the planking under water, and had to be detached from the rope. We are now going on moderately well, and have the water down within 6 ft. of the clack door. In the 60 east on Pant-y-Pydew lode, we are getting nice lumps of lead. In the drivage from sump in sole of 60, east on north and south lode, the ground has improved, and nice lumps of lead are being raised. I expect an improvement here as we get nearer the swallow. The dressing of ore is being urged on as fast as possible.—Copper and Lead Mines, Harlech: I have nothing new to report from here; the lode in the deep adit south is about 1½ ft. wide, of quartz spotted with sulphur and copper, but not enough to be of any commercial value.

PRINCE OF WALES.—S. Roberts, G. Rowe, Sept. 14: The shaftmen are getting on fairly with the sinking of Watson's engine-shaft. In the 90 fm. level east we put the men back about 3 fms. behind the end in a bend or turn in the lode to take down the south side, to ascertain if the main lode had taken off at that point. In doing so we discovered the lode, which is now 1 ft. wide, producing good stones of rich copper ore, yielding a quantity of water and improving in character as we advance. We commenced blasting down the lode in the rise in back of the level, which is 4 ft. wide, producing rich black and grey ore with native copper, the north part of which is good tinstone. No change in stope from No. 1 rise since last week: 90 end west, lode 1½ ft. wide, and appears to be forming a splice in the lode, which will only temporarily affect the lode.—Goodluck: Same as reported last week.

ROMAN GRAVELS.—Arthur Waters and Son, Sept. 15: The 65 south maintains its productiveness, lode being 4 ft. wide, worth 10 tons of rich ore per fm. The 95 south was holed to the winze (Roberts') from the 80 yesterday, and the men are now driving the end south of that point on a lode worth 2½ tons per fathom. No other change to notice since our full report of the 13th inst. We are sending out samples of 160 tons of lead ore for sale next week.

RUSSELL UNITED.—J. Gifford, J. Bray, Sept. 15: We are pushing on the work for putting in the line of wire rope from the large wheel to Stephen's shaft with all possible speed, and hope to complete it at the time promised if the rope is sent in time. There is no change to notice in the underground departments since last report.

SILVER HILL.—George Rickard, Sept. 15: The tunnel level is now driven north into the hill about 145 fms. The ground in the forebreast is full of mineralised branches and leaders of mundic, copper, carbonate of iron, crystallised quartz, and blende, all dipping north towards the Dreamer's lode, which cannot, in my opinion, when intersected fail to be profitable for tin, copper, and perhaps zinc ores. I never saw such a highly mineralised stratum of ground fail to produce large quantities of mineral, more particularly when accompanied with so much water, which is strongly impregnated with mineral held in solution. We are about 26 fms. north of the blende lode, and have opened out about 3 fms. on on the course of this lode, which is about 10 ft. wide, producing on the footwall zinc and a little silver, intermixed with gossan, mundic, and spotted ore. Excellent progress continues to be made in extending the tunnel, the drivage being over 6 fms. per week. The machinery continues to work very satisfactorily.

SORTRIDGE.—Wm. Skewis, Sept. 15: The clearing of the deep adit is steadily progressing, and although it is a most intricate and difficult piece of work to do, we are, I think, making very good progress, and I hope now in a very short time to report to you the successful letting down of the water the 40. The cross-cut north-east of the engine-shaft has been driven into (No. 2) a lode from 4 to 5 ft.; as yet no north wall has been seen. The lode produces good stones of tin and copper; altogether it is a fine strong-looking lode. The lode in the stope of this level, west of engine-shaft, is also producing good work for tin. We shall sample several tons of stuff from each place next week, and report result to you.

SOUTH CONDURROW.—William Rich, Wm. Williams, Humphrey King, Sept. 14: In the 93 fm. leuel end east we have begun to cross-cut south to prove the south part of the lode. The bottom of the 80, east of King's, is worth 12*l*. per fathom. The 80 end, east of Plantation shaft, is worth 10*l*. per fathom. The lode in the back of this level is worth 10*l*. per fathom. We have a rather hard bar of ground in the 70 cross-cut south, but we hope soon to get through it. To 70 end, east of King's, is unproductive. The 60 end is worth 50*l*. per fathom. The stope in the back of this level is worth 12*l*. per fathom. We have begun to drive the 60, west of Plantation; the lode in the end is poor at present, but the stope in the back of this level is worth 13*l*. per fathom. The 50 end east is worth 12*l*. per fathom. We hope to complete Marshall's shaft to the 40 in a week from this time; after that we shall begin to fix the double skip-road. The cylinder, beam, and heavy portions at Marshall's are fixed, and the masons will now begin to build the boiler-house.

SOUTH DARREN.—Henry James, Sept. 15: We are making good progress in sinking the shaft, and have a strong lode by the side, but cannot state its value, as we have not broken into it lately; when we have completed the sinking to the 130 we shall then cut through and prove its value. I am pleased to say the lode in the 120 east is holding on well, and worth for lead 1½ ton per fathom. The 120 west is being driven speedily; as the lode is not taken down, I am not able to give its value this week. The lode in the 110 east will be taken down in due time. We are expecting to hole the 110 west to the winze very soon; the lode in the side is looking very promising and valuable. The stopes in the back of this level are producing their usual quantities of ore. The tribute pitches are yielding ore in paying quantities. The engine is at present pumping, the water-wheel being painted, &c. The 45 tons of silver-lead ore sold on Friday last realised 631*l*. 2s. 6d.

SOUTH DEVON.—W. Hooper, Sept. 15: Setting Report: The 110, east of Brook engine-shaft, has been driven during the past month 4 fms. 1 ft. 3 in.; set to six men, at 9*l*. per fathom; the lode is 4 ft. wide, with a value of 20*l*. per fm.; for the last 6 ft. driving the lode has been composed of more spar, with patches of killas. I look upon this as a temporary change, from the fact of the level over being subject to like changes. No. 1 stope in the back of this level is set to four men, at 2*l*. 12s. 6d. per fathom; the lode is 2½ ft. wide, with a value of 6*l*. per fathom. No. 2 stope is set to four men, at 3*l*. per fathom; the lode is 3 ft. wide, with a value of 7*l*. per fathom. No. 3 stope is set to six men, at 3*l*. 5s. per fm., the lode is 3 ft. wide, with a value of 10*l*. per fathom. The 100, east of Brook engine-shaft, has been driven during the past month 5 ft. 4 in.; ditto cross-cutting south through the lode 2 fms. set to four men, at 8*l*. per fathom; we shall continue this cross-cut until satisfied we have the south or killas wall. A stope in the back of this level set to four men, at 4*l*. 10s. per fathom; the lode is 4 ft. wide, with a value of 7*l*. per fathom. The 90, east of Brook engine-shaft, has been driven during the past month 1 fm. 0 ft. 8 in.; after cross-cutting through the lode a short distance we found the south or hanging wall, and being satisfied there is nothing of value left in this direction we have set the end to drive east by two men, at 9*l*. 10s. per fathom; lode 5 ft. wide, composed principally of spar, mundic, and good stones of copper ore. No. 1 stope in the back of this level is set to four men at 2*l*. 10s. per fathom; lode 3 ft. wide, with a value of 6*l*. per fathom. No. 2 stope set to four men, at 2*l*. 15s. per fathom; lode 3 ft. wide, with a value of 9*l*. per fathom. The 80, east of Brook engine-shaft, has been driven during the past month 5 ft. 8 in.; set to two men, at 11*l*. per fm.; the lode or part carrying is 5 ft. wide, producing occasional stones of copper ore, but not of sufficient quantity to value. No. 1 stope in the back of this level is set to four men, at 3*l*. 5s. per fathom; lode 3 ft. wide, with a value of 10*l*. per fm. No. 2 stope set to eight men, at 5*l*. per fathom; lode 5 ft. wide, with a value of 10*l*. per fathom. The lode in the adit level, driving west of old sump shaft, is 4 ft. wide, composed of splendid gossan and capel, and rich stones of copper; such a lode cannot fail to produce large quantities of this mineral by driving deeper levels.—Surface: I calculate the engineers will finish the hauling-engine to-morrow, and hope to put it to work on Saturday. The men are now engaged fixing lift at Martin's shaft, and hope to have it completed in the course of a few days, when sinking will be resumed. Having plenty of water for hauling and dressing purposes I am pleased to say we are getting on well for our next sampling.

SOUTH PENSTRUTHAL.—Stephen Davey, Sept. 14: Walton's Engine-Shaft: The shaftmen have completed the cutting of angle-bob pit, put in the anchorage timber, and the bob will be sent underground to-day, and fixed without delay. In the flat-rod shaft we have dropped fork lift below the 60 fm. level 12 fms., and forked the water about 6 fms.; by end of week we expect to reach the 70; rods, bobs, and all appliances are answering exceedingly well. We have cleared the 30 cross-cut south, and secured it 56 fms., and have about 8 fms. more to reach the end, which will be complete in a week, when we shall at once commence driving south to reach the tin lode. The plant and machinery are in good condition, and working well.

SOUTH TOLCARNE.—T. Angove, S. Arthur, Sept. 14: The lode in the bottom of the engine-shaft is 5 ft. wide, producing saving work for tin, which is of a better quality than when last reported on. In the 60 end west the lode is 6 to 7 ft. wide; it has improved since last report, and produces good saving work for tin. In the 60 end east the men are still driving the cross-cut north; the end to-day has altered in appearance. We shall be able to report more fully on this next week. The stopes are looking just as well as when last reported on. We are getting some good tinstone from the rise in the back of the 30.

SOUTH WHEAL CREBOR.—J. Goldsmith, Sept. 14: There is no change to report this week on either point of operation. No lode has been taken down

TAMAR SILVER-LEAD.—R. Goldsworthy, Sept. 15: I beg to hand you our setting report:—To drive the 57 south, by six men, at 7*l*. per fathom; the lode is 3 ft. 6 in. wide, producing 3 cwts. of silver-lead and 4 tons of fluor-spar per fathom, and promising for further improvement. To drive the 27 cross-cut, by four men, at 12*l*. 10s. per fathom, stent the month or cut the lode; the ground is wet and highly mineralised, which looks well for the lode, and when intersected it will be productive. To drive the 27 south, by four men, at 7*l*. 10s. per fathom; the lode is 4 ft. 6 in. wide, composed of congenial capel, spathose iron, fluor-spar, mundic, and rich stones of silver-lead—a very promising lode, and where a discovery may be made any day. Good progress has been made in sinking the new shaft, and the men trying hard to earn their premium.

TANKERVILLE GREAT CONSOLS.—Arthur Waters and Sons, Sept. 15: There is no change of note in either of the mines. Fair progress is being made in draining the Bog Mine. At Pennerley things are being pushed on fast as possible. There is every sign of the north lode at Tankerville improving east and west of Watson's engine-shaft. We have sampled 60 tons of lead ore, for sale next week.

TAVISTOCK GREAT CONSOLS.—H. Treganowan, Sept. 14: We are pushing on the rise in the back of the deep adit level as fast as possible. Very fair progress was made during the past week. No other change to notice since I last reported.

TEMPLE.—Sept. 13: The lode in the adit west is improving in appearance, producing a little lead and blende in increasing quantities; there is every prospect of finding lead in quantity as the level is extended westward. The rock boring machinery is working satisfactorily.

TREVINCE CONSOLS.—John Mayne, Sept. 15: The mine continues to open up very well, only requiring a little further development, as I believe it to be one of the best mines this immensely rich district ever produced.

VAN CONSOLS AND GLYN.—James Roach, Sept. 14: The 70 fm. level, west of Murray's, is improving in appearance; the forebreast contains lime, spar, blende, and strong spots of lead, which is indicative of our approaching valuable ground as we extend the level towards the ore discovered in the 60. The cross-cut driving south on the lode in the 60 west is without alteration since my last advice. The same remark will apply to three stopes being wrought in this level. No. 1 stope in roof of the 50 is yielding ore quicker than for some time past; it contains various branches of lead from 1 to 2 in. thick, pretty solid; it is cautiously worked to prevent falls and accidents. No. 2 stope is yielding lead in paying quantities. The drivage east at the 40, towards No. 1 stope, is yielding good stones of lead, and seems to be improving. The ground in the 50, west of Gundry's, has become easier for driving; to-day I have let it for the month, at 5*l*. per fathom; the forebreast now contains blende and sulphur, which I hope will soon lead to lead, as anticipated. Tributers are still at work, and earning good wages. We have some 3 tons of lead raised towards the next sampling. The machinery is in perfect order, and all work throughout the mine progressing satisfactorily.

VINCENT.—J. Dingle, Sept. 14: Engine-shaft: The lode in winze at bottom of 30 is about 14 in. wide, composed of quartz, spots of tin, a little copper, and mundic; looks promising for improvement. In the stope at back of the 30 there is no change to notice; the lode is about 2 ft. wide, and the quality of tin-stuff same as before.—Horseborough Shaft, 15 West: The lode in the end is about 2 ft. 6 in. wide, composed of quartz, arsenical mundic, tin, and some rich quality copper ore; a strong masterly lode. In the stope at back of 15 the lode is full 2 ft. wide, composed of quartz, mundic, copper, and tin; I have this morning put on another pare of men in this stope.—Surface and General Remarks: We sold on Wednesday last 6 tons 3 qrs. 1 lb. of black tin, which fetched 315*l*. 9s. 6d., and are as busy as possible stamping, &c., to get ready another parcel. The masons are repairing oven in burning-house; it will, I think, be finished to-morrow, after which we shall again commence burning. The roofs over hauling gear are on. The engine, pitwork, and all machinery are in good working order.

WEST CARADON.—N. Richards, Sept. 14: The men are making fair progress in driving the 38, west of the main cross-course, on Oilpin's lode. We have now effected a communication between the winze sunk on this lode in the bottom of the adit level and the rise in the back of the 17, but it it will take three or four days to square the ground for passing the stuff through; when this is accomplished we shall resume the driving of the adit level towards the western boundary, where we have a long run of unwrought ground. I would here remark in the back of this level, only a few fathoms behind this end, we broke the greater part of our best parcel of ore for the last sampling, and now having good ventilation there will be no difficulty in proving this ground. There is no other change to notice in any other part of the mine since last week's report.

WEST CHIVERTON.—R. Southey, Sept. 8: The 80 end, east of Hawkes, is producing good stones of lead, and the stope behind the end is looking very well for lead; if any difference it has improved since my last. We are also driving the 50 end east; the lode is split up in branches, but the part carried is worth 8*l*. per fathom, and looking very kindly for an early improvement. Some fine mundic has been met with in the 70 cross-cut, and the ground looking very kindly, but no lode yet met with. At Batters we are clearing the level east of shaft, and our tributers are earning good wages. We shall be sampling 50 tons of lead very shortly.

WEST DEVON GREAT CONSOLS.—George Rowe, Sept. 14: We are forking the water in the new shaft with the horse-whim, which we find a slow process; nevertheless it will be some considerable benefit to make the shaft in good condition to receive the pitwork and clear the way by drawing up the stuff at the 15 and remove all timber work so as to send down the pump work through the water if found to be too powerful for our present appliances, the horse-whim, &c., but should the weather continue dry we hope to make progress in sinking the shaft while the engine is fixing, which will be accomplished with all possible speed. Our carpenters and assistants are busy in fixing up sheds for smiths and carpenters' workshops, and changing places for the miners and labourers, at the same time the engineers are marking out the foundations for the buildings, and preparing the necessary plans and section for the contractors, and will commence taking the machinery down and getting it on the mine as quickly as the nature of the work will admit.

WEST GODOLPHIN.—T. Hodge, F. Hodge, Sept. 14: Caunter Lode: The 70 south-east end is worth 6*l*. per fathom. The 20 north-west is worth 6*l*. per fm. —Wilson's Lode: The 70 east end is worth 10*l*. per fathom. No. 1 stope in the bottom of the 60 is worth 6*l*. per fathom. No. 2 stope is worth 15*l*. per fathom. No. 3 stope is worth 8*l*. per fathom. No. 4 stope is worth 8*l*. per fathom for tin and copper ore. The 70 west end is still in the cross-course. The 53 west end is letting out much water, and worth 6*l*. per fathom—a very promising end. Surface work is being pushed on as fast as the nature of the work will admit.

WEST HOLWAY.—R. Rowlands, Sept. 15: I have much pleasure in handing you my annual report on work accomplished since the last general meeting of shareholders. The new shaft, which at the time of my last report, had been carried down to the 95 yard level, has now attained a depth of 122 yards from surface, and we are still urging on the sinking. At the 110 yards level we drove out east and west upon the lode, but after going 4 yards east the shale took a drop, so we suspended the driving until the increased depth of our shaft would enable us to meet in a lower level. To the west we have driven 13 yards in a splendid lode, from which we have obtained a fair quantity of ore, and it is now worth 25 cwts. per fathom. In sinking the shaft we are now 12 yards below the 110 yard level, and for a distance of 6 yards on the western side the lode is worth 1½ ton of lead ore per fathom. In about 3 yards further sinking I would recommend driving east and west upon the lode, as I am sanguine that these bottom levels will be the most productive in the mine. We have driven the 95 yards level east a distance of 40 yards in a very strong lode about 4 ft. wide, and the same level west has been advanced 22 yards in a splendid lode 3½ ft. wide, composed of spar, carbonate of lime, and black chert in the hanging side; and although we are yet short of meeting the 80 west run of ore, it has a most promising appearance. The 80 east has been driven upwards of 73 yards, and 27 yards have been stoped in the back of same. To the west this level has been advanced a further 50 yards in a masterly looking lode. Two rises have been put up in the back of the level. No. 1 has been stoped about 40 yards, and is now worth 1½ to 1¾ ton of lead ore per fathom. No. 2 stoped about 13 yards, and lode worth for lead 1 ton per fathom, and likely to improve. We have repaired the levels in whim shaft, and cut through to No. 2 rise in the 80 west, so the mine is now thoroughly ventilated. We have re-opened Ram shaft to the 40 yards, and put out a level south on the lode for a distance of 5 yards to enable us to make a lodge, and also for the safety of the shaft before commencing the cross-cut. The latter has now been driven some 28 yards, and I expect to intersect Allsopp's lode within another 10 yards. I feel confident when this is completed we shall have a splendid mine at this end of the sett, as we have some hundreds of yards of virgin ground north along the lode which to the south yielded immense returns to the former workers. In conclusion, I am of opinion that we have everything for the making of an exceedingly rich and lasting mine, especially as depth is attained, for the lode opens out stronger in every length we sink the shaft.

WEST KITTY.—W. Vivian, Sept. 15: The lode in the 72, driving east, is worth about 20*l*. per fathom. The lode in the 60, driving east, is worth about 50*l*. per fathom, and the lode in the 50, driving west of rise, is worth about 50*l*. per fm. The lode in the 90 is small and poor at present, and of no value. Good progress is being made in the cross-cut driving south of engine-shaft at the 60. No change at the other points of operation since last week.

WEST LISBURNE.—I. Glanville, Sept. 14: I have much pleasure in stating that in driving the 14 east a rib of 8 in. wide has come into the footwall, containing yellow copper ore, blende, and lead ore. A large quantity of water is issuing from the end, and we may expect a great and early improvement at this point. Nothing else has occurred since my last report of the 7th inst, requiring comment.

WEST POLBREEN.—W. Vivian, Sept. 15: The prospects of the cross-cut driving north of Wheal May shaft are very favourable, and we are meeting with branches of spar. The ground has now become very wet.

WEST WHEAL TOLGUS.—John Gilbert, Sept. 15: At Richard's shaft the lode in the 105, driving west of shaft, is 3 ft. wide, yielding stones of mundic and copper ore, and looking a little more promising. The lode in the 95, driving west of shaft, is 3½ ft. wide, composed of spar and mundic, and yielding some copper ore, but not sufficient to value. The lode in the stope in the bottom of the 95, west of shaft, is 3 ft. wide, yielding 3 tons of ore per fathom, worth 15*l*. per fathom. The lode in No. 2 stope in the bottom of the 95, east of winze, is 4 ft. wide, yielding 3½ tons of ore per fathom, worth 17*l*. 10s. per fathom. The lode in the stope in the bottom of the 85, west of Taylor's shaft, is 2½ ft. wide, yielding 2 tons of ore per fathom, worth 10*l*. per fathom. The rise in the back of the 105, west of Richard's shaft, is communicated to the winze in the bottom of the 95. The 105 cross-cut, driving south-west of Richard's shaft, was driven from the north part of the lode to the south part to communicate the rise with the winze. We shall sample on Tuesday next about 125 tons of copper ore.

WHEAL BOYS.—W. T. White, Sept. 13: It is very satisfactory to me that I can report so favourably of the general prospects of this mine. As level after level is being drained of water fresh and more important features in connection with the lack lodes are being discovered. We have now cleared the shaft down to the 30, and we have a pare of men clearing the 30 of ochre and stuff: in several places in this level the north copper lode (as in the upper levels) has been extensively worked. We could not sufficiently trace the workings at this level, owing to that being so much sediment and stuff in the level; we are now clearing this as fast as possible, but in several places where the lode is standing very rich copper ore is to be broken; we expect to set tributers to work on this when convenient to do so. At the 20 we have cleared the south cross-cut out 44 fms. beyond Cardrew's Great Flat lode; 20 fms. south of this lode is a copper lode of excellent promise, being from 5 to 6 ft. wide, and extensively worked. I broke some very rich ore from this lode on Saturday last, and have set a pare of men to work on it in the back this level, and in the course of another week I hope to get a parcel of the stuff at surface; this is the same lode that is now being worked on in Wheal Pussia, and is, I understand, producing some very rich ore in that mine. I have not as yet been able to see this lode at the 30, on account of the level being so full of sediment, and I hope to report more fully respecting this in my next, but as far as we have seen of the workings at the 30 it is a very productive lode, and must have yielded large quantities of ore in the former workings. We are now about to put up an horizontal engine to facilitate the drawing of the stuff. The prospects of the mine are exceedingly good, and as we proceed in depth I am encouraged with the belief that in Wheal Boys we have a valuable property.

WHEAL COATES UNITED.—W. H. Martin, Sept. 14: The ground in the 80 south cross-cut at present is principally composed of light blue killas. The lode in the 70 east end is looking more favourable, the south part containing more gossan, intermixed with tin and mundic. The driving of the 70 west end is attended with greater speed. On the south side we met with a leader of light blue peach, which greatly assists the driving, and worth for tin 8*l*. per fathom. The lode in the 50 east end is very speedy for driving, and is opening up a long run of tin ground, worth for tin 6*l*. per fm. There is no other change to notice.

WHEAL CREBOR.—G. Rowe, H. Phillips, Sept. 13: The new shaft sinking be low the 120 is progressing very satisfactory, and 2 fathoms below the level; the lode has not been taken down. The men are now preparing the necessary timber-work for hanging tackle and cutting trip-plat, &c. The lode in the 120 east is improving in size, now 5 ft. wide, worth 8*l*. per fathom. The lode in the 108 east is without change. The lode in the stope below the 108, west of winze, is worth 15*l*. per fathom. The ground in the new cross-cut, driving north in the 108, east of Cock's engine-shaft, is a little stiffer for progress during the past week. The lode in No. 1 stope, in the back of the 108, east of new shaft, is worth 35*l*. per fathom. The lode in No. 2 stope, in the back of the same level (the 108), east of the rise, is worth 45*l*. per fathom. The lode in No. 3 stope, in the back of the same level (the 108), is worth 55*l*. per fathom, and showing indications of improvement. The lode in No. 4 stope east is worth 15*l*. per fathom. The lode in the rise going up above the 96 is worth 30*l*. per fathom. All the other points of operation are without change.

WHEAL FORTUNE.—Wm. Knott, Sept. 14: The 40 cross-cut north has been driven 5 ft. during the past week. The ground throughout has been, and the end still is, traversed with branches of quartz and zinc, with faces of copper and mundic. These indications fully warrant driving a few feet further north. The lode in the end of the 44, west of engine-shaft, is 2 ft. wide, composed of quartz, with a leader of carbonate of iron 3 in. wide, still highly charged with sulphur mundic. The end of the 30, east of Bennett's shaft, has been driven 6 ft. during the past week, and has yielded 5 cwts. of silver ore of moderate quality. The lode in the end of the 30 west is 18 in. wide, and producing saving work for silver, but at present is in a rather unsettled state. The tributers are working with spirit on the coppery mundic lodes, from which they have broken 20 tons of good quality.

WHEAL GEORGE.—C. Kneebone, Sept. 14: The winze is down about 10 ft. below adit, and the lode maintains its value of last week, but is somewhat irregular, being so close to surface. Last week I reported the middle of winze was not quite so rich as the ends. To-day it is the reverse; but, taken altogether, I have never seen a finer lode within 5 fms. from surface.

WHEAL GRENVILLE.—T. Hodge, Sept. 15: The 190 east end is looking more promising. The 178 east produces stamping work. We have several fathoms more to drive to reach the bunch of tin gone down in the level above, The winze below the 165 east, going down before the 178 end, is suspended on account of the water. The lode is worth 10*l*. per fathom. The 165 east end is worth 12*l*. per fathom. Fine's stope, in the back of said level, is worth 20*l*. per fathom. Littlejohn's stope, in the back of said level, is worth 18*l*. per fathom. The 150 east end is worth 15*l*. per fathom. The ground is hard, and letting out much water, which renders progress slow. The 150 north cross-cut is going out at a point, say 30 fms. behind said end. We are in the lode about 5 fms.; the lode in the end produces some fine lumps of tin, and letting out water freely, which we consider a good indication. If we come on a good lode in the foot wall part it will be of great importance to us. The 140 east end is worth 12*l*. per fathom. No other changes. All the machinery is working very well, and surface work is going on satisfactorily.

WHEAL PEEVOR.—W. T. White, T. C. King, Sept. 13: We are pleased to say the shaftmen are making good progress in sinking the engine-shaft below the 90; at the present rate of sinking we shall sink at least 10 ft. this month. This is a great improvement on the past, and is owing chiefly to the alteration we made in the pitwork, and not having any hindrances. We calculate we are now sufficiently deep enough now for the junction of both lodes, which are about 8 fathoms north of the shaft; the latter being at present perpendicular, and in

the country. We intend sinking to the 100 before we cross-cut to the lode, being more advantageous for future operation. The 90 end west is slightly improved. The 90 east is without change. The 80 west is improving, and appears to be getting through the bar of ground that we have for the last few fathoms been in. In the 80 east the lode is large, and producing fair work for tin, about the same as last reported. The men are making good progress in driving the cross-cut south in the 60, east of Nicholl's cross-course, and we hope in the course of another month we shall cut the lode, which has not been seen east of this cross-course below the 45 by the present company. All operations on the middle lode and other places without change.

WHEAL JANE.—James Reed, Sept. 14: The tribute pitches throughout the mine are looking well upon the Great Flat lode. The change from tutwork to tribute thus far is very satisfactory, as the assays fully prove, and the men are getting good wages. I have put six men to drive a cross-cut north at the 60 fm. level to cut the north part of the Great Flat lode, as it has not been seen in this part of the mine. This cross-cut is now producing fair quality stamping stuff for tin. There is every prospect of our laying open an extensive section of valuable ore ground both above and below this level.—Gilbert's Shaft: In the driving west from No. 1 cross-cut upon Ready Money lode it is 4 ft. wide, worth for tin 8l. per fathom. This lode in the driving east from No. 1 cross-cut is about 5 ft. wide, worth for tin 8l. 10s. per fathom. This lode in the stope at the deep adit level east from rise is 3 ft. wide, worth for tin 8l. per fathom. The sumpmen are engaged drawing to surface the old 14 in. pitwork, main and bucket rods, &c. This work will be accomplished this week, when we shall at once commence cutting ground for bearers and cistern at the 60, and fix plunger at that level. The 60 in. cylinder engine is working four strokes per minute to keep the water with the 17 in. pitwork, which we have recently completed to the 60 fm. level.

WHEAL UNY.—H. Eddy, W. Prophet, J. White, Sept. 15: The lode in the side of the 170 west is worth 15l. per fathom; the men will be put to drive in a day or two. No. 1 stope, in back of this level, is worth 20l. per fathom. There is no other material change since last week's report. We shall be taking down the copper lode next week, when we expect good results. The 3-inch pipes for boring machine purposes are put in from the 170 to surface, and we have commenced putting in the 2-inch pipes east and west in the 170.

The Mining Market: Prices of Metals, Ores, &c

METAL MARKET—LONDON, SEPT. 16, 1881.

	£ s. d.	£ s. d.
IRON.		
Pig, GMB, f.o.b., Clyde	2 9 3-	—
„ Scotch, all No. 1	2 10 0-	—
Bars, Welsh, f.o.b. Wales	5 2 6-	—
„ „ in London	5 12 6-	—
„ Stafford., „	6 15 0-	—
„ in Tyne or Tees	5 10 0-	—
„ Swedish, London	9 10 0-	—
Rails Welsh, at works	5 5 0-	5 7 6
Sheets, Staff., in London	8 0 0-	8 5 0
Plates, ship, in London	7 2 6-	7 5 0
Hoops, Staff.	7 0 0-	7 5 0
Nail rods, Staff., in Lon.	6 0 0-	6 7 6
STEEL.		
English, spring	11 0 0-	18 0 0
„ cast	30 0 0-	40 0 0
Swedish, keg	14 10 0-	—
„ fag. ham.	15 0 0-	—
LEAD.		
English, pig, common	15 0 0-	15 5 0
„ „ L.B.	15 10 0-	15 15 0
„ „ W.B.	16 0 0-	16 5 0
„ sheet and bar	15 15 0-	—
„ pipe	16 10 0-	—
„ red	16 15 0-	—
„ white	21 0 0-	23 0 0
„ patent shot	17 17 6-	—
Spanish	14 15 0-	—
NICKEL.		
Metal, per cwt.	15 0 0-	16 0 0
Ore, 10 per cent. per ton	20 0 0-	25 0 0
QUICKSILVER.		
Flasks, 75lbs., war. (nom)	6 5 0-	—
SPELTER.		
Silesian	16 0 0-	16 5 0
English, Swansea	16 15 0-	—
Sheet zinc	20 5 0-	20 10 0

	£ s. d.	£ s. d.
TIN.		
English, ingot, f.o.b.	98 0 0-	99 0 0
„ bars „	99 0 0-	100 0 0
„ refined	100 0 0-	101 0 0
Australian	93 0 0-	93 5 0
Banca ......nom.	—	—
Straits	93 0 0-	93 5 0
COPPER.		
Tough cake and ingot	65 0 0-	66 0 0
Best selected	66 0 0-	67 0 0
Sheets and sheathing	74 0 0-	75 0 0
Flat Bottoms	77 0 0-	78 0 0
Wallaroo ......nom.	67 10 0-	68 0 0
Burra, or P.C.C.	66 10 0-	—
Other brands	63 0 0-	65 0 0
Chili bars, g.o.b.	61 0 0-	61 5 0
PHOSPHOR BRONZE.		
Alloys I., II., III., and IV.	£120 0 0	
„ VI. and VII.	135 0 0	
„ XI., Spl. bearing metal	112 0 0	
BRASS.		
Wire	6½d.-	—
Tubes	9 -	—
Sheets	8¾-	—
Yel. met. sheath. & sheets	6⅛d.-	6½
TIN-PLATES.*	per box.	
Charcoal, 1st quality	1 2 0-	1 4 0
„ 2nd quality	0 18 0-	1 0 0
Coke, 1st quality	0 18 0-	0 18 6
„ 2nd quality	0 15 9-	0 17 0
Black ......per ton	15 10 0-	—
Canada, Staff. or Gla. at Liverpool	12 0 0-	—
Black Taggers, 450 of 14 × 10	30 0 0-	—

* At the works, 1s. to 1s. 6d. per box less for ordinary; 10s. per ton less for Canada; IX 6s. per box more than IC quoted above, and add 6s. for each X. Terne-plates 2s. per box below tin-plates of similar brands.

REMARKS.—During the past week marked activity has for the most part characterised the metal market. In the leading metals there has been a large business transacted, and in consequence better prices have been realised. The sudden burst of activity which has dawned upon our markets can hardly form a matter of surprise; in fact, it must have been more or less anticipated for an improved tone has been smouldering for a long time past, and has now burst forth into marked briskness, leaving those buyers in the lurch who before hesitated to effect purchases, and at any rate for the time being necessitating them to still further increase their limits in order to secure their current requirements, while doubts exist as to whether purchases will be able to be made much longer even at the present advanced prices. That will depend chiefly, if not wholly, upon the supplies and demand, and before leaving these two questions, setting entirely apart the chances of a future increased or diminished supply and demand, it would be well to bear in mind that in many instances just now the former is kept under the latter, so that there is a diminution in the visible stocks of some metals which if continued must necessarily lead to much higher prices.

A short time back, when the tone was apparently somewhat depressed, we ventured to state that the apparent depression was merely created by "bear" operators who momentarily were endeavouring to knock down prices in order to buy afterwards the more advantageously, and the state of the markets this week has certainly confirmed that opinion, for not only has a good *bona fide* business been carried through, and not only have the "bull" operators been buying freely, but previous "bears" must likewise—in a measure at least—have been covering their previous sales, so that throughout the week selling orders have been prominent only for their absence, while buying contracts have been plentifully entered into. There are several reasons for implanting a more cheerful feeling in the markets just now, and coming, too, at a time when very few, if any, adverse influences are at work they naturally create still greater confidence than they otherwise would. For instance, the "scare" which was caused from probable dear money has—for a time at all events—been removed, and no longer do discouraging reports come to hand of a likely drain of gold; but, at the same time, operators would do well to bear in mind that there is still some chance of a higher rate for money. Again, the threatened crisis in Egypt is over, and although this only affected our markets to a very slight extent—hardly to be worthy of note—yet with its removal the recovery in the markets is partially facilitated. Further than this, advices of the condition of the President of the United States are more satisfactory, and give increased cause for hopefulness. Then, again, the actual business which is now being executed gives sufficient employment for most of the works and mills throughout the manufacturing districts to be kept actively going, while in some metals a manifest curtailment in the supplies is perceptible. There are likewise numerous other circumstances of a more or less equally propitious character, but to which there is no necessity to refer just at the moment, for enough incidences have been brought before our readers to prove that the upward movement is warranted by existing events, and it is for buyers to decide as to the advisability of increasing their present orders or not.

COPPER.—Since our last a brisk business has been done in this metal at improving prices. The market having previously been neglected for so long a period, the present increased vitality is much appreciated, and holders are again becoming hopeful that they will not have to wait much longer ere they can turn their stocks out advantageously. The charters from Chili, which were announced yesterday as 2900 tons, and corrected to-day as 3300 for the first part of the present month, being somewhat heavy, may perhaps have slightly damped the tone, but, at the same time, to such a slight extent as hardly to be worthy of note, and as prices are maintained it is an evidence that the market is not supported merely by speculation, but upon a more substantial foundation, or, in other words, by the transaction of a large legitimate business. Heavy charters just now need form no matter of surprise—in fact, it was probable that they would have been heavier than of late, because for a long time past they have been exceptionally light, and, therefore, being rather in excess this time, gives no reason for anxiety, especially when it is remembered that the total charters for the whole of this year are much below those for the few previous years, while the total supplies, as seen by the last statistics, are below the requirements of the trade. In manufactured an extensive business is doing, and sheets have been advanced to the extent of 1l. per ton. This rise was only made yesterday, so that there has hardly been, as yet, sufficient time to see what effect it will bear upon the demand; but, judging from the present number of enquiries, it would seem that buyers will have to come up to seller's quotations in order to make business practicable.

According to the bi-monthly returns the imports of Chili produce during the first fortnight of this month have been 570 tons, against 2570 tons for the same time last year, the deliveries for the corresponding periods being 1308 tons, against 1286 tons. The imports of other kinds of copper for the first half of this month reported as 546 tons, and the deliveries 1500 tons. The stock of Chili produce in first and second hands in Liverpool and Swansea yesterday was 28,388 tons, against 29,126 tons on the 31st ult., or a decrease of 738 tons. According to the Board of Trade Returns, the imports during the first eight months of this year have been 57,156 tons, against 64,019 tons in 1880, and 66,867 tons in 1879, while the exports for the same periods have been 40,763 tons this year, against 41,527 tons in 1880, and 43,705 tons in 1879. At the public Ticketing, held at Swansea last Tuesday, 1257 tons of copper ores, of an average produce of 7¾ per cent., were sold at an average of 11s. 3½d. per unit. There will be no sale on Sept. 25.

IRON.—In manufactured there is no change to record, a fair demand existing without any perceptible alteration in prices. With regard to Scotch pigs, however, there is greater excitement in the market, and an extensive business has been carried through at rather irregular prices. Pending the decision of the joint committee as to what course they intended to pursue in maintaining or reducing the supply, buyers take the most hopeful view of the matter, and in anticipation of a reduced make transactions are freely made, and holders have been able to realise better prices. It is proposed to reduce the number of furnaces in blast in the Cleveland district by 20 per cent. This, however, is considered by the Cleveland masters as excessive, and, therefore, there is considerable uncertainty as to the actual number that will be damped down. It is, however, to be hoped that whatever decision be come to a sufficient curtailment will be made in the supplies to make some favourable impression upon the stocks, which are now enormous, and necessitate a large reduction to ensure a permanent establishment of higher prices. The damping down of just a few of the furnaces has ere this been proved to be of little avail, hence it would appear advisable to blow out a reasonable number at the present time, otherwise if only a few be put out of blast, and the stock continues to increase, the agitation for a further reduced make will in all probability again arise. According to a contemporary the number of furnaces in England, Scotland, and Wales is 984, of which 417 are now standing idle, leaving 567 at work. As these figures show such a great number of furnaces out of blast, in fact nearly half of them, it may possibly be from this cause that the Cleveland makers are so slow to blow out the proposed number, but at the same time, since stocks are so enormous, especially in Middlesborough and Scotland, the returns showing a total increase of about 277,000 tons compared with this time last year, some large reduction in the supplies seems not without cause called for, especially when it is remembered that deliveries are, and have been for a long time past, very fair if not good, and that the stocks have increased merely by overwhelming supplies.

On the Glasgow Warrant Market this week an extensive business has been carried through, and at advancing prices. The price opened on Monday at 47s. 8½d., but buyers being very plentiful, sellers soon advanced their price to 48s. 1½d., but buyers then for the most part did not care about paying the improved figure, and on Tuesday the price receded again to 47s. 8d., but as speedily recovered to 48s. 1d., the market opening on Wednesday at 48s. 4½d., and advanced to 49s., while yesterday up to 49s. 6d. to 48s. 10½d. was quoted, the market closing to-day at 49s. 3d., cash. The foreign and coastwise shipments last week were 14,812 tons, against 11,721 tons for the same week last year, or an increase of 3091 tons, and which makes the total shipments for the whole of this year 398,127 tons, against 509,156 tons for the same time last year, and 355,010 tons in 1879. The number of furnaces in blast is 119, and the stock in public stores has been increased by a further 1783 tons, now amounting to 583,330 tons, against 581,547 tons last week. The imports of Middlesborough pig-iron into Grangemouth last week were 4660 tons, against 5265 tons for the corresponding week of last year, or a decrease of 605 tons, and which leaves a total increase for the whole of this year compared with last of 38,263 tons. The Cleveland market is reported rather excited, and makers are said to have taken advantage of the improved feeling, and have made free sales. Quotations are for the most part steady, the price asked for No. 3 being 38s., and for No. 4, 37s. There is but a limited business only doing in warrants, which rule at about 38s. 6d. for No. 3. Shipments of pigs are heavy, the exports last week being over 22,000 tons. In manufactured prices are firm, ship-plates ruling at 6l. to 6l. 2s. 6d, bars at 5l. 12s. 6d. to 5l. 15s, and angles at 5l. 12s. 6d. per ton.

The Wolverhampton market is strong, and for the local make of pigs rather better prices have been obtained, owing chiefly to the rise in Scotch pigs. Certain part mine pigs shows a rise of 1s. 3d. to 2s. 6d. Finished ironmasters are said to hold numerous orders, and good class bars have advanced 5s., now being sold at 6l. There is a fair sale for boiler plates at 8l. 10s. to 9l. per ton. The Birmingham market is reported as animated, and prices all round show an advancing tendency. Ordinary bars here, as in Wolverhampton, are also up 5s. per ton, now selling at 6l. for prompt delivery, manufacturers only booking orders for forward delivery subject to the next quarter day's quotations. Sheets show a similar rise, now being quoted at 8l., while local pigs are 2s. 6d. dearer, makers asking 42s. for cinder pigs. At Sheffield an improved tone is perceptible in the manufactured trade, and a large business is said to have been transacted for consumption. Shipping business is also fairly brisk, and prices are firm. There is no change to report from the Welsh districts, a fair business still being done, chiefly for rails. According to advices from New York of the 9th inst. there are symptoms of weakness in the price of Scotch pigs, while the upward tendency in scrap and old rails has also been somewhat checked. Gartsherrie, Glengarnock, and Coltness are all quoted down 2s., offering at $23, $22·50, and $23·50 respectively. Eglinton is unchanged at $21. Scrap is 2s. and old rails 4s. lower, the former being quoted at $27·50 and the latter at $28. Cleveland pigs show a rise of 2s., and are offering at $19, while the quotation for hematites is $24·50.

TIN.—Throughout the week this market has continued to steadily improve, and a large business has been done, great interest being taken in the various fluctuations of the market. Opening on Monday at 92l. 2s. 6d. to 92l. 12s. 6d. cash for foreign, according to prompt the market, strengthened on Tuesday by 2s. 6d. per ton, a similar advance also being made on Wednesday. Yesterday, however, buying was more spirited, and the official quotation was 92l. 15s. to 93l. 5s. cash, the market closing to-day at 93l. to 93l. 5s. The great support which for a long time past has been given to this market has been the continuance of a limited supply and good demand. The statistics, from time to time showing a diminution in the visible stock, has tended to implant considerable confidence, encouraged buying, and thus caused the advance in prices to their present apparently remunerative figures; and, notwithstanding the dear prices which now rule, there does not appear any likelihood of any immediate reduction in them, but, on the contrary, operators are still very sanguine that still higher rates will shortly be realised, which opinion will probably prove correct if the supplies keep limited and the demand be maintained as heretofore; and it may be mentioned that the deliveries for the first fortnight of this month are estimated as fully up to the average.

SPELTER.—The market is strong, prices being quoted about 5s. per ton higher.

LEAD.—A moderate business only is doing in this metal, but prices, in sympathy with other metals, have assumed a progressive tendency in an upward direction, and common pigs are about 2s. 6d. to 5s. per ton dearer than they were a week ago.

STEEL.—A large business is doing in this metal, and prices keep firm. While the various mills throughout the manufacturing centres remain as actively engaged as at the present time there seems little or no chance of any concessions being made in prices.

TIN-PLATES.—A fair number of transactions are reported from day to day at steady prices.

QUICKSILVER.—Firmly maintained at 6l. 5s.

At Swansea Ticketing, on Tuesday, 1257 tons of ore of 7¾ average produce, and containing 97 tons 13½ cwts. of fine copper, were sold for 5512l. 16s. 6d., being 4l. 7s. 8d. per ton of ore, 11s. 3½d. per unit, or 56l. 8s. 9d. per ton of fine copper in the ore, and an average standard of 82l. 12s. 7d. for 9 per cent. produce. Subjoined are the particulars of the two last sales:—

Date.	Tons.	Standard.	Produce.	Per ton.	Per unit.	Ore copper
August 23	1626	£79 11 3	8⅛	£4 7 7	10s. 9¼d.	£53 17 1
Sept. 13	1257	82 12 7	7¾	4 7 8	11 3½	56 8 9

Compared with the last sale, the advance has been in the standard 3l. 1s. 4d., and in the price per ton of ore of about 4s. 9d. The Betts Cove ore gave an average produce of 6 11-16, and realised 10s. 9¾d. per unit; Union, produce 7¼, per unit 11s. 6¼d.; Berehaven, produce 11½, per unit 12s 2d. There will be no sale on Sept. 27.

The dealers in the MINING SHARE MARKET have been principally engaged since our last in the settlement of a heavy fortnightly account, but notwithstanding this a good demand has existed for several prominent mines, and a large business has been transacted both for speculation and investment.

Since the previous settlement a fortnight ago there have been improvements in the prices of tin, copper, and lead, and the following shares have also improved in price:—Carn Breas, 6l. per share; Cook's Kitchen, 7l. per share; Dolcoath, 16l.; Killifreths, 1½; New Kitty, 10s.; West Kitty, 1l.; Tincrofts, 1l. per share; West Frances, 9l.; South Crofty, 8l. This rise in the fortnight amounts in the aggregate to 159,310l.

TIN.—On Saturday last the smelters advanced the standards for ore in Cornwall 3l. per ton. Writing on the Friday before, we were rather surprised they had not then done so, considering the price of tin in the London market. Tin shares have been generally firm, and several have advanced considerably. Blue Hills, 2½ to 3. Cook's Kitchen have again risen to 24½, 25½; Carn Breas to 27, 29; Dolcoaths to 87½, 90—leaving off 86 to 88; East Pool, 38 to 39; East Lovell, 2½ to 3; Killifreth, 1½ to 2. New Kitty have been weaker at 2½ to 3. At the North Levant meeting, held in Cornwall, the accounts showed a loss on four months' working of 387l., and a debit balance of 284l. The tin sold (15 tons) realised 790l. The agent hopes that the returns will increase. Phœnix, 3¾ to 4¼. Polrose, ¾ to 1; at the meeting the accounts showed a balance against the mine of 309l. 7s. 6d., and a call of 1s. 6d. per share was made. The report of the mine was considered very favourable, and important improvements are looked for during the next three months.

South Condurrow, 9½ to 10; South Crofty, 12 to 13; South Frances, 14½ to 15½; Tincroft, 19 to 20; West Basset, 14 to 15; West Polbreen, 30s. to 35s. West Frances have advanced from 12 to 19, 21; West Kitty, 10 to 11; West Peevor, 14 to 15; Wheal Agar, 14½ to 15; Wheal Grenville, 11 to 12; Wheal Jane, 10s. to 15s.; Wheal Jewell, ⅝ to ¾; Wheal Peevor, 13 to 14; Wheal Sisters, 2 to 2½. At Levant meeting a loss of 590l. was shown on four months' workings. Wheal Basset, 4½ to 5; at the meeting held in Cornwall a loss of 3789l. was shown on six months' working, and a call of 13s. per share (3900l.) was made, payable in two instalments; the tin sold realised 143l. 18s. Wheal Uny have advanced to 3, 3½; the mine has improved in the 170 west. Drakewalls, 15s. to 20s.; East Blue Hills, ½ to ¾; Goodevere, 1⅛ to 1¼; Kit Hill, 15s. to 20s.; Mount Carbis, 3 to 3¼; North Penstruthal, ¾ to 1; West Godolphin, 2 to 2½.

COPPER mines have not been so much in request as tin mines, but a fair business has been done in a few. Bedford United, 1¾ to 2; Carnarvon Copper, ⅞ to 1⅛; Devon Great Consols, 7¾ to 8¼; Devon Great United, 1 to 1¼; East Caradon, ⅜ to ⅝; Gunnislake (Clitters), 3 to 3½; Hingston Down, 1⅛ to 1¼; Mellanear, 4 to 4½; Marke Valley, 1⅛ to 1⅜; Morfa Du, ⅝ to ⅞; New West Caradon, ⅜ to ⅝; Parys Copper, ¾ to ⅞; West Caradon, 1 to 1½; West Crebor, 9s. to 11s.; Wheal Crebor, 3⅜ to 3⅝; West Seton, 17 to 19. Devon Friendship, ⅞ to 1⅛; the adit continues worth 6 tons of arsenical mundic per fathom, and another parcel of tin will be ready next week. Sortridge, 1 to 1¼; No. 1 tin lode is producing good stones of tin and copper, and is described as a fine looking lode. The lode in the stope has good work for tin. South Devon United, 1⅝ to 1⅞; New Cook's Kitchen, 6½ to 7. Prince of Wales, ¾ to ⅞; from the report it would seem that the lode had been missed in the 90, and a good discovery may be made in that and other levels. It has long be thought in the district, considering the rich character of the lodes at the upper levels, that the drivages below were not on the main part of the lode. Mona, 10 to 11.

LEAD MINES, on the whole, are rather improving, but actual business is not very extensive at present. Vans are quoted 8 to 9; Great Laxey, 17 to 18; Roman Gravels, 10¾ to 11¼. Tankerville, ⅜ to ½; the north lode shows every sign of improving east and west of Watson's shaft. The mine has sampled 60 tons of lead ore, for sale next week. East Roman Gravels, ¾ to 1; the 109 south is worth ¾ ton of lead per fathom and 1 ton of blende. The 109 north 2 tons of lead. The plant for the boring machinery is approaching completion. Pandora, ½ to ¾; the 45 south is opening up a good lode, worth 1½ ton per fathom; stope 2 tons, winze below the 33 fm. level 1½ ton. At Northern Lead the tribute ground above the 42 will yield in two places 25 and 15 cwts. of lead respectively. Glenroy, ⅜ to ⅝; the stope in the roof of the 25 is worth 1 ton of lead and 1 ton of blende per fathom.

East Chiverton, 1½ to 2; Derwent, 1¼ to 1¾; East Craven Moor, ⅝ to ⅞; East Van, 1 to 1½; Gorsedd and Merllyn, 2½ to 3; Herodsfoot, ½ to ¾; Leadhills, 1¾ to 2; North D'Eresby, 1 to 1¼; Kirk Michael, 1 to 1⅛; Great West Chiverton, 5s. to 7s. 6d.; North Herodsfoot, ½ to ⅝; Pen-yr-Orsedd, 1 to 1½. South Darren, 1⅜ to 1⅝; there is a strong lode at the side of the shaft, which will be taken down when the 130 is reached. The 120 is worth 1½ ton lead. The sale last week realised 631l. 2s. 6d. Tamar, ¾ to 1. Great Holway, 5 to 5½; the 60 driving east has opened into a strong lode of lead, worth at present 3 tons per fathom. West Holway, 35s. to 40s.; the accounts to be presented to the general meeting show, we understand, a good credit balance.

FOREIGN MINES.—Almada, 3-16ths to 5-16ths; Arendal, 2½ to 2¾; Brazilian Gold, 1 to 1¼. English-Australian, ⅞ to 1⅛; the advices show expenditure 432l. 9s. 9d., returns (exclusive of pyrites) 134 ozs. 9 dwts. of gold, valued at 540l. Cape Copper, 44½ to 46½; Colorado, 2 to 2¼; Copiapo, 3⅛ to 3⅜; Don Pedro, 7-16ths to 9-16ths; Canadian Copper and Sulphur, 1½ to 1¾; Colar, ½ to ⅝; Devala Central, ¾ to 1; Devala-Moyar, 1⅜ to 1⅝; Devala Provident, 1-16th to 3-16ths; Hoover Hill, ¾ to 1; Indian Glenrock, 1½ to 1¾; Indian Phœnix, 1⅛ to 1⅜; Indian Trevelyan, ⅞ to 1⅛; Indian Consolidated, ⅞ to 1; Mysore, 1⅝ to 1⅞; Ooregum, ½ to ¾; Potosi, ¾ to 1; Rhodes Reef, ¾ to 1; Santa Cruz, ½ to ¾; South-East Wynaad, 1¼ to 1½; South Indian, 1⅝ to 1⅞; Tambracherry, 1⅛ to 1⅜; Wynaad Perseverance, ⅞ to 1⅛; Frontino, 3¼ to 3¾; Mysore Reef, ½ to ¾; Javali, 4s. to 6s.; New Quebrada, 4¼ to 4½; Panulcillo, 4⅞ to 5⅛; Pestarena, 5-16ths to 7-16ths; Richmond, 15¾ to 16¼; Ruby, 3⅜ to 3⅝; St. John del Rey, 195 to 205; Gold Hill, 1 to 1¼

The Market for Mine Shares on the Stock Exchange has been fairly active throughout the week, and prices at the close are generally better. The best possible feeling prevails with regard to the future of tin and copper mines; tin ore is higher in price, the smelters having announced an advance in the standards on Tuesday of 3l. per ton on Saturday, and the copper ore offered at Swansea having been sold at a standard higher by more than 3l., the result being that on Tuesday 7¾ per cent. ore fetched one penny per ton more than was paid for 8⅛ per cent. ore on Aug. 23. The advance in many of the home tin and copper mines has been considerable. The prospects of copper mines are now considered highly encouraging, and tin and lead mines are regarded with scarcely less favour. It is not doubted that even with present prices for ores many mines which have temporarily suspended the payment of dividends will speedily re-enter the dividend list.

In Indian Gold Mine shares the improvement noticed last week has been fully maintained, and prices are gradually advancing. It has been announced during the week that some of the principal shareholders in the Wynaad concerns have arranged to provide a fund of 2000l., of which 1000l. is to be given to the manager of the mine who first produces 5000 ozs. of gold from the mine, of course; 500l. to the second producer of 500 ozs.; and 500l. to be equally divided amongst the staff of the two mines, at the discretion of the managers. It has been suggested by certain dealers that if this 2000l. be invested in the Three per Cents. at once the amount distributable to the staff might be somewhat augmented by the accrued interest at the date of the award; but it must be admitted that the 2000l. alone should suffice to encourage energy and secure early dividends if there really be any reefs in the Wynaad, which can be profitably wrought. With the improved processes of gold extraction introduced during the past 30 years, with Mr. Readwin's demonstration of the growth of gold, and with Mr. Kagenbusch's discovery that a silicate of gold exists in Nature, and that consequently he can extract sometimes 80 ozs. of the precious metal from a ton of ore which other chemists and metallurgists declare to contain little or no gold in any condition, the brilliant prospects of holders of gold mine shares can only be doubted by those who entertain the opinion Messrs. Readwin and Kagenbusch are mistaken. But whatever may be the cause, it is beyond question that

Indian gold mine shares are in greater favour this week, and upon this holders may be fairly congratulated.

The National Excursion Steamship, Colliery, and Salvage Company, with a capital of 250,000*l*., in shares of 1*l*. each, has issued its prospectus, inviting subscriptions for 175,000*l*. The company, as will be seen from the prospectus in another column, is formed to provide for its members at reduced rates, and also for the general public, improved accommodation for marine excursions, and from its own collieries coal for domestic purposes, in addition to which, and as a source of considerable profit, the company will undertake and carry on at home and abroad salvage operations. A most advantageous provisional contract has, it appears, been entered into, whereby the company's objects may be immediately attained. The purchase includes a steamship capable of carrying 600 passengers, two collieries in the Forest of Dean, and an extensive salvage plant. The purchase money has been fixed at 110,000*l*., and peculiar special advantages are offered to investors. Every shareholder in the company will be entitled for every share he holds to two first-class return tickets for a passage between London or Blackwall and Boulogne at five shillings each, being a reduction of ten shillings each below the usual charges, which vary from thirteen shillings to eighteen shillings and sixpence, or an average of fifteen shillings; or in lieu thereof, at his option, will be entitled to five first-class return tickets between London or Blackwall and Margate, at two shillings each, being a reduction of four shillings each on the usual prices, and in either case realising, practically, a gain or bonus equal to a return of the entire amount of his investment; or in lieu thereof he will be, in like manner, entitled to four tons of the best coal from the company's collieries, delivered carriage free within three miles of any of the company's depots in London or suburbs, at a reduction of five shillings per ton below the current price of the day for best coal charged by such of the leading merchants as shall be adopted as a standard by the board of directors from time to time. Shareholders requiring delivery near London, at a greater distance, will be charged the additional carriage, while for other localities in England nearer to or further from the colliery the price will be fixed at seven shillings per ton at the pit's mouth for five tons for each share, with the addition of the actual cost of carriage and delivery only. This rule will apply to Bristol, Gloucestershire, &c., while at Boulogne, Paris, and all other parts of France wherever the company may have depots, the reduction will be on four tons per share six francs below the current market price per ton for the best coals in such localities, and will be determined by the directors from time to time, the object and effect being that in most cases the shareholder can thereby obtain what to him will be practically a speedy return of his entire investment, yet still remain a shareholder in the company. After the return of capital by the foregoing arrangements shareholders will, nevertheless, be entitled to coals, excursions, &c., at rates below those of the general public.

Indian Glenrock Gold, 1½ to 1¾; the manager writes with reference to the telegram which was published three weeks ago, Aug. 19: "The stuff coming from the Korumber Tunnel is so good that Capt. Morris talks of a house to store it in." At Glenrosa, in No. 2 tunnel they have the reef in bottom of drivage, which is making up as they advance, but it is awfully white (not a stain). Referring to which a subsequent telegram recently received reports: "Glenrosa reef 10 ft. thick, free gold visible."

South Indian Gold, 1⅝ to 1⅞; nothing fresh is reported, except that all the works are progressing satisfactorily.

The Wentworth Gold Mining and Indian Estates Company announce that a mine manager and two assistants left for the estates last month, and boring-rods (for use on the company's extensive swamps), and all other necessary mining tools for preliminary work, have been shipped. A compact and very complete set of crushing stamps and reduction plant, sufficient for extensive prospecting purposes, will be dispatched in about a fortnight. The general manager and the consulting engineer (Mr. C. J. Harvey) leave England next week. The latter will proceed *via* Australia, and expects to be on the Wentworth estates in December, by which time sufficient progress will have been made to enable him to decide upon a plan of permanent operations. The news received from various sources of the condition of the company's valuable cinchona plantations is regarded as of a most encouraging character.

Devon Great Consols, 8 to 9; the sale of 866 tons of copper ore next week is expected to realise a much better price than that of the previous month.

Devon Great United, 1 to 1¼; operations are progressing satisfactorily here, copper ore and arsenical mundic of a good quality being produced.

Kit Hill, par to ¼ prem.; good progress continues to be made in driving the deep adit level, and the surface operations are progressing as fast as the nature of the work will admit.

Vincent Tin, ¾ to 1¼; in another column will be found the captain's report on this mine which states that the lode still maintains its size, being above 2 ft. wide, and improving. It is remarked that the rich quality of the tin is apparent from the fact that 6 tons were sold last week to Messrs. Bolitho, and realised 52*l*. 5s. per ton; also that they are busy stamping to get ready another parcel of tin for sale.

West Godolphin, 1⅛ to 2⅛; it is reported that these shares are in good demand; that tinstuff is being drawn from the mine, and that the lode in the 50 west and 70 east are well for a course of tin.

Richmond, 15¾ to 16¼; the usual telegram from the mines at Eureka, Nevada state that the week's run was $13,000 from 883 tons of ore. During the week the refinery produced doré bars to the value of $45,000. The manager (Aug. 24) reports that the rise in back of the 200 is now up 73 ft. The ore in present back is 4 ft. wide, and of better quality. This point is looking very encouraging for the finding of an ore body. The rise in back of 700 is still in ore, and looks very promising. The shaft is now down 309 ft. below the 900, and first set of timbers are in place for the 1200 ft. station. The shaft will be sunk 30 ft. below the 1200 for a sump, which will be completed about the end of the month. The furnaces are doing good work, and the machinery, both in mine and smelting works, is in good working order.

The Flagstaff District directors have, since the special meeting of shareholders on Monday, received further advices from their foreman at the mine, in which he announces that in the fourth level 21 ft. had been run during the week, and that a large new body of iron ore had been opened up, which, it was found upon assay, contained per ton $5 in silver and over $12 in gold. He further states that timbering had been found necessary during the entire distance, thus showing that the ore is of a soft description, can be inexpensively mined, and will leave a large profit. Prof. Vincent has, it is understood, been desired by his colleagues to return to Utah and personally superintend the commencement of the shipping of this ore; and in the shareholders' interests they hope that he will acceded to the request.

Missouri, 10 to 10½; the general meeting is called for Friday next. The accounts show that 5638*l*. 9s. 3d. worth of ore has been obtained at a cost of 4979*l*. 17s. 7d. The London management expenses have been 8908*l*. 8s. 4d., so that by charging half of the general expenses and half of the London expenditure to capital account a profit of 497*l*. 7s. 4d. is shown upon the year's operations. Directors' fees 500*l*., and secretary and rent 130*l*., are among the sundry creditors, and there is cash at bank and in hand in London 78*l*. 7s. 2d., and at St. Louis 663*l*. 5s. 9d. The future of the enterprise is considered to be very encouraging.

Sentein, ⅞ to 1⅛; these shares are reported to be in demand. The total quantity of marketable silver, lead, and zinc ores returned from the mine for the three months ending July 31 amounted to 1647 tons, thus showing the resources of the property. Large monthly profits are now being regularly realised.

The Koh-i-Noor Silver Mining Company have received a telegram from the mine dated Sept. 14 to the effect that the appearance of the mine is improving daily, and there is positive evidence that they are nearing a very valuable deposit. The following telegram has been received on Sept. 16:—"Shaft ore assays $345 per ton."

In Lead Mine shares there has been considerably more business doing; and although prices paid for lead ores have not yet advanced to the same extent as those of tin and copper, an important improvement is confidently looked for. Minera, 9 to 9½; the 270, west of Taylor's, is producing lead and blende; and the 290, west of Meadow, is looking promising.

East Long Rake, ⅞ to 1⅛; it is reported that the mine continues to open up very favourably, and gives promise of developing into a dividend-paying property. The middle lode at present being worked upon is producing satisfactory results, and has important features in advance, the eastern end approaching a juncture with a powerful lode—the Wagstaff lode—which has produced large returns of lead in the shallower levels; and when this junction is reached there is little doubt that a valuable deposit of ore will be met with. The western end, which has now a rib of ore several inches wide, is opening into a profitable piece of ground, with a rich north and south lode ahead. When the machinery, which is already far advanced, is completed, good returns can be made; and as the mine is opened up at the 60 (10 fms. below the present workings), to which depth the shaft is already sunk, there is is no doubt that results will be obtained highly satisfactory to all concerned, as there are several rich courses of lead gone down below the 50, and the lodes being worked are known to be in the productive measures for a considerable depth, having been proved rich at double the present distance from surface. We are convinced that there is a profitable and lasting future before this mine, and the shares will ere long command greatly enhanced prices.

Pant-y-Mwyn, 1⅞ to 2⅛; the 22, west of Modlyn, is opening out a fair lode, and is nearly through the cross-course. British Silver Lead, 1 to 1⅛; the mine is said to be looking as well as last reported.

The Tramways and General Works Company announce that the Milan-Giussano section of the Lombardy Road Railways was opened for public traffic on Sept. 10, and has been largely patronised by the public.

Messrs. A. H. Baily and Co., the old established agents, have removed to 15, Nicholas-lane, King William-street.

In Diamond Mining Company shares there is still nothing doing, notwithstanding the efforts that are being made to induce the public to buy. The Kimberley Diamond Mining Company held a meeting on Wednesday, but the Press were excluded, perhaps because the profits were less than those of the Kimberley Central, which by the last accounts published amounted to 1 per cent. on the nominal capital for the three months working, and promised to be reduced to *nil* during the succeeding three months. Public companies when they are earning profits do not usually shun publicity; but as has frequently been stated in this column the diamond concerns do not offer capitalists an ordinary prospect of profits. Those who are attempting to manipulate the market have no object but to get rid of the stock; hence the caution exercised to prevent the true financial position and prospects of the several concerns becoming public. Mr. Stransky writes that the intelligence by the last mail regarding the money market is that the impression which has for some time past greatly retarded the operations in the mines is somewhat less than it was when the previous mail was dispatched. A later telegram, he says, brings very favourable accounts of the result of operations in the Bultfontein Mine, and shows that when the working is down to the "blue," the yield averages 17s. 6d. per load, whereas previously, when in surface soil, the yield only averaged from 5s. to 6s. per load. From Jagersfontein the accounts are very favourable, and some unexceptionally fine stones were received from that mine per last mail. As it has been more than once declared that mines of far less reputation than Bultfontein would average 25s. per load in the yellow, the admission that Bultfontein itself yields but 17s. 6d. in the blue is significant. Some figures are promised, showing the value per claim per foot in depth, even assuming the average of 17s. 6d. per load to be maintained.

Gas Shares.—The principal business in these shares, according to this evening's report of Messrs. W. L. Webb and Co., of the Stock Exchange and Finch-lane, has been—Commercial, 189; Continental Union, 22⅝; ditto 7 per cent. preference, 25¼; European (Limited), 20⅛ to 20¼; ditto new, 9⅛; Gaslight and Coke, A, ordinary, 173¼ to 174½; ditto, H, 7 per cent. maximum, 134 to 134½; Hong Kong and China, 16 to 16⅛; Imperial Continental, 193 to 194½. Gas stocks steady. For closing prices see list on the last page of Journal.

Insurance Shares have, according to this evening's report of Messrs. W. L. Webb and Co., of the Stock Exchange and Finch-lane, been dealt in as follows:—City of London Fire (Limited) 1 13/16 to 1 15/16; ditto Marine Corporation, 11/16 to ¾; Employers' Liability, 1⅝; Home and Colonial Marine, 3⅛ to 3; Indemnity Marine, 115½ to 115¼; London and Provincial Law, 8; London and Stafford Fire, 1; Royal Insurance, 30½; Standard Fire, 2½ to 2⅝; Universal Marine (Limited), 8½. Quiet, nothing doing. For closing prices see list on the last page of Journal.

Tramways.—The closing prices of this evening, as quoted by Mr. W. Abbott, of Tokenhouse-yard, are given in tabular form in the 12th page of Journal.

Railway and General Markets.—Referring to the course of business done to-day during official hours (11 to 3) Mr. Ferdinand R. Kirk, 5, Birchin-lane, writes:—*Opening:* There is an active demand for tin shares. West Godolphins are being largely dealt in at over 2, Wheal Uny have now reached 3, and Polrose ½ to ¾. West Kitty, 10 to 10½; West Polbreen, 1½ to 1¾; New Kitty, 2½ to 2¾. Egyptian Unified are steady at 76⅜, and the Preference at 96⅞, in marked contrast to the wild dealings of Tuesday, when in a few minutes Unified was beaten down to 73⅛, and the Preference to 91¾. In Indian mines Tambracherry are well thought of since the recent meeting, and are wanted at 1½; Don Pedro, ⅜ to ⅝; Frontino, 3¼ to 3½. North British are nearly 1 higher, and some profess to know that the dividend will be 2 per cent. Atlantic Thirds recently referred to when 9¼ are strong at 11 to 11½. All the Trunk issues are better.—*Closing:* The British dividend is confirmed, and the price is now 86¼, a rise of 1¼. Most other home railway stocks are higher. Tilbury and Southend yesterday dealt in at 150 is now quoted 154 to 156. Trunk Thirds rose 1 yesterday, and are now 1 still higher, at 39⅝ to 39⅞, the Ordinary being firm at 19. There seems no reason why prices should not further advance.

Messrs. Pixley and Abell.—Gold: Although no gold has been withdrawn from the Bank for the United States, about 80,000*l*., chiefly Dutch coin melted, has been bought in the open market for New York. The arrivals comprise 13,000*l*. per Nile, from the West Indies, and 100,000*l*. (of which 60,000*l*. in sovereigns) per Cotopaxi, from Australia. The Royal mail-steamer Neva took, on the 9th inst., 50,000 sovereigns for Lisbon, and 94,000*l*. in bars for Buenos Ayres; 25,000*l*. was shipped, per P. and O. steamer Nepaul, on Wednesday, for Bombay. Since the date of our last circular the Bank of England has received 96,000*l*. in sovereigns and foreign gold coin, and 100,000*l*. have been withdrawn. The P. and O. steamer Verona, due on the 20th inst., brings 75,000 sovereigns. ——Silver: Our market for bar silver has been somewhat steadier since our last, when we quoted bars 51⅝d. per oz. standard. About 6000*l*., per Nile, from the West Indies, was sold at 51 11/16d. on the 12th inst., which is the price this day. About 63,000*l*. has arrived from New York; 32,000*l*. was shipped to Bombay, and 10,000*l*. to Calcutta, per P. and O. steamer Nepaul.

Devon Friendship.—The axle of the large pumping-wheel (10 ft. breast) is on the pit, and in about four weeks the wheel will be at work. Another parcel of tin will be sold this month. Everything is going on very satisfactorily, and in a very short time this grand mine will assume a prominent position by force of returns and profits. There has been a delay in arriving at this position through the foundry by not delivering the machinery as they had agreed.

Tamar Silver-Lead and Fluor-Spar Mine.—The sinking of the new shaft is being rapidly proceeded with, and when completed it will furnise the ventilation which is so much needed to enable the company to develope their recent discovery in the 27 south, on the South Tamar lode. The company have over ½ mile run on the course of this lode, and when the new shaft is completed they will be able to open up an entirely new mine. The richness of the South Tamar lode in the mines where it was formerly wrought upon is almost a guarantee that it will prove of equal value when more fully developed in the Tamar Mine.

North Wales Slate Trade.—On Thursday last notices were posted at Lord Penrhyn's Carnarvonshire slate quarries, which for the last half-year have been working only four days a week, that full time would be worked next week. The trade continues brisk.

Bratsberg.—Oapt. Daw has just received over 400 tons of copper ore from these mines, and a portion of which is expected to be over 20 per cent., and the other portion over 30 per cent. for copper. Being also rich for silver this ore will fetch a high price. This is most encouraging for the lately established Bratsberg Copper Company, who have bought the mines,

Brazilian Gold Mines.—Advices have been received that at the Matta Matta Mines as the drift approaches the perpendicular under the lode seen in the gold washings above the vein is found intermixed with mundic—the index of gold. Wilson's drift had not advanced a sufficient distance to cut the belt of the Matta Matta veins. At Servico Velho Mine a tramroad is being laid in connection with the stamps. In the jacotinga section of the property operations have been accelerated since ventilation had been secured, and in the "lines" had considerably improved in the produce of gold. The vein had gone down below the level. Whenever jacotinga "lines" are auriferous the Brazilian miner looks for valuable discoveries in the immediate zone. Gold-producing "lines" are there regarded as the unfailing finger-posts to gold deposits. It is a significant feature that these indications are being developed in a continuance of the same formation which in the famous Gongo Soco Mine returned in five years gold to the value of 1,500,000*l*.

Sentein.—This mining property promises to fulfil the most sanguine expectations, as large returns have been made during the past few months under the new management. The reserves of ores in the mine were valued at from 30,000 to 40,000 tons last February by Messrs. John Taylor and Sons' special mining engineer, but owing to the recent improvements in the mine they are now probably more.

Notices to Correspondents.

*** Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be *filed* on receipt; it then forms an accumulating useful work of reference.

SIR,—Can any reader inform me what is the present value of Eureka (Nevada) and Callao "Bis" (Venezuela) mining shares, and do they pay dividends? I have not seen their price quoted in the Journal. I should also like to know whether Albion shares are marketable here?—ENQUIRER.

Received,—"F. A." (Cincinnati)—"R. Y."—"R. H. F." (South Darren and East Craven Moor)—"Shareholder" (Wheal Crebor)—"M. C." (Exter)—"X. Y. Z." (Dublin)—"R. E. S."—"E. W. H."—"Constant Reader" (Bognor)—"A. M." "Shareholder" (Olathe)—"E. B."—"W. G." (Limerick) should apply to the broker through whom he purchased the shares—"Old Contributor" (Manchester): Next week.

THE MINING JOURNAL,

Railway and Commercial Gazette.

LONDON, SEPTEMBER 17, 1881.

THE CIRCULATION OF AIR IN MINES.

When mines are now being sunk to greater depths than was previously anticipated it is essential that those engaged in sinking to and developing the minerals should be acquainted with the laws regulating the circulation of air in mines, as are gathered by the study of physics. One of the principal objects of the person in charge of a mine should be to have the air sent from the surface to where the men are working both pure and cool, but this is frequently not the case, although it is a comparatively easy task. It should be known that the walls of subterranean excavations are usually warmer in winter and colder in summer than the atmospheric air, and that in the spring and autumn these accidental differences of temperature, are sometimes one way and sometimes the other. When the movement of the air is determined in any direction in winter the movement will continue indefinitely of itself, as the pit by which the air descends will be constantly filling with air still colder, whilst that by which it ascends will remain full of warm air; but in summer the air which enters being warmer than that which escapes the excess of pressure will assist in an inverse way to the movement. When there are two galleries not on the same level the ventilation will be just the same as that in two vertical shafts—the air in winter entering by the lower gallery and escaping by the higher one, and the opposite takes place in summer. It is always by affecting the specific gravity of air that a continuous current is obtained in a mine. It frequently happens, however, in winter where the current is most active that the air becomes too sharp, and is too much for the men employed in the galleries connecting the two openings to the outer air, but this can be easily remedied by placing in the passage where the current is the sharpest doors which do not quite meet, or do not close together, leaving spaces by which the air can pass, and be increased or otherwise as desired. Where such doors are placed there will be a diminution in the current of air in the galleries, from which it passes after making a long circuit, so that ultimately the total quantity of air circulating the workings is decreased. In the course of a single shaft the air is renewed by the property of diffusion which all gases possess, but the ventilation is not then generally found sufficient.

In sinking the shaft it will be found that in winter the interior air is less dense than the outside, because it becomes heated in contact with the walls of the shaft, and at the same time becomes saturated with steam. The air alluded to ascends to the atmosphere, and is replaced by cold air, which becomes heated and saturated with steam, and then in its turn ascends. During summer the internal air is more dense and the diffusion operates slowly, unless it is assisted by an escape of carburetted hydrogen. If percolation of water come from the higher part of the shaft the ventilation is considerably quickened, because the water in falling draws the air with it and thus directs the currents descending the length of the walls to the spot where the water falls, whilst the ascending currents place themselves near the centre or by the opposite side. The greater the dimensions of the shaft the more easy will it be to renew the air. When air is forced through a long pipe by any machine, or drawn through it by some exhausting contrivance placed at the other extremity, the air will be found gradually to decrease in density from the beginning to the end of the pipe, and the difference between the initial density and the density at any other point will be the measure of resistance opposed by the air-way up to that point. It will also be found, if the air of a mine is carefully measured by a barometer, it will be found gradually to diminish in the same manner in its density or pressure from the bottom of the downcast to the top of the upcast shaft. In underground operations where plenty of air is required there should not be any difficulty in giving it. This is, perhaps, easiest effected by splitting or dividing the current of air, by which almost any quantity can be sent through the workings of a mine, whilst by having a separate split the air is brought much purer and cooler to the men, and this should not be overlooked by persons in charge of mines, seeing that it is simple and at the same time most effectual. Nothing is of greater importance in mining than a constant supply of fresh air to the places where the men are working, and a man of ordinary ability having the management of a mine should find no difficulty in having plenty of air sent in all directions. The main current of air can be increased to the required amount if tolerable attention is paid to the air-ways, which should be kept well open. Simple as the circulation of air in mines may be considered, it is one of the most important points as regards the health and safety of the workmen, and even a moderate knowledge of the laws relating to the causes of the circulation of air in mines and the general properties of aeriform fluids, will be found of advantage to persons who are entrusted with the management of either coal or metalliferous mines.

OUR RAILS ABROAD.

The foreign and colonial demand for our rails was fairly good in August, although the fair promise of the immediately preceding months was scarcely sustained. The total quantity of iron rails exported in all directions in August was 9801 tons, as compared with 8207 tons in August, 1880, and 2351 tons in August, 1879, while steel rails were exported to the extent of 37,806 tons in August, as compared with 44,329 tons in August, 1880, and 38,530 tons in August, 1879. The combined exports of iron and steel rails from the United Kingdom in August were accordingly 67,607 tons, against 52,536 tons in August, 1880, and 40,881 tons in August, 1879. So much for August by itself. If we now extend the comparison to the eight months ending Aug. 31 this year we find that in that period iron rails were sent abroad to the aggregate extent of 92,740 tons, as compared with 102,733 tons in the first eight months of 1880, and 25,574 tons in the first eight months of 1879. Of steel rails the aggregate shipments to Aug. 31 this year were 390,293 tons, against 331,686 tons in the corresponding period of 1880, and 223,153 tons in the corresponding period of 1879. We thus find that the combined shipments of iron and steel rails for the first eight months of this year were 483,033 tons, against 434,419 tons in the first eight months of 1880, and 248,727 tons in the first eight months of 1879.

The satisfactory results indicated by these figures are attributable to the increased demand for our rails which has prevailed this year in the United States and the principal British colonies. In the first eight months of 1879 we only sent the United States 331 tons of iron rails, while in the corresponding period of 1880 the corresponding exports expanded to 74,875 tons, and in the corresponding period of 1881 to 77,576 tons. Similarly, while we sent the United States only 13,201 tons of steel rails in the first eight months of 1879, the corresponding exports rose in the corresponding period of 1880 to 82,814 tons, and further expanded in the corresponding period of 1881 to 186,662 tons. It follows that the United States absorbed 214,238 tons of our rails in the first eight months of this year, as compared with 157,689 tons in the first eight months of 1880, and 13,532 tons in the first eight months of 1879. The exports of our iron rails to the three principal colonial groups—British America, British India, and Australasia—moved on as follows in the first three months of the last three years:—

Colonial Group.	1879.	1880.	1881.
British America .....Tons	1,834	1,338	1,198
British India.....	4,237	10,701	3,045
Australasia.....	5,339	3,051	2,381
Total	11,410	15,090	6,624

The corresponding exports of steel rails have been as follows:—

Colonial Group.	1879.	1880.	1881.
British America .....Tons	33,830	65,339	68,303
British India.....	29,842	67,150	25,815
Australasia.....	33,081	46,664	52,415
Total	96,753	179,153	146,533

The exports of our iron and steel rails combined to the principal colonies accordingly stand as follows for the first eight months of the last three years:—

Description of Rails.	1879.	1880.	1881.
Iron .....Tons	11,410	15,090	6,624
Steel	96,753	179,153	146,533
Total 108,163		194,243	153,157

It follows from an examination of these tables that of the 248,727 tons of iron and steel rails exported in the first eight months of 1879, 121,695 tons went to the United States and British colonies; of the 434,419 tons exported in the first eight months of 1880, 351,932 tons went to the United States and British colonies; and of the 483,033 tons exported in the first eight months of 1881, 367,395 tons went to the United States and British colonies. The exports in other directions accordingly amounted to 127,032 tons in the first eight months of 1879, 82,487 tons in the first eight months of 1880, and 115,638 tons in the first eight months of 1881.

COAL-CUTTING MACHINERY.

The progress made in the adoption of machinery for cutting coal in mines, and so relieving the miner of the most exhausting and hazardous of his duties, has made but slow progress at home, but is advancing in the estimation of colliery owners abroad. In Germany and other parts of the Continent, as well as in America, machines have been successfully adopted. Several are now at work in mines at Yorkshire, some of them cutting 30 yards and upwards an hour. Mr. Gillott, a well-known patentee (Gillott and Copley), has several in operation in the South Yorkshire district, and he has received orders for others by parties working them, and quite lately, he informs us, he has had applications for them from New Zealand, where several large fields of coal are now being opened out by English miners, and also from British North America, where one of the best known Yorkshire mining engineers has recently gone to develope some portion of the mineral wealth of that distant English colony. Gillott and Copley's machine has been considerably improved of late, and leaves scarcely anything to be desired; and seeing that compressed air is coming into pretty general use for underground haulage, the power for the coal cutter can be at once obtained at a mere trifling cost. The machine is now much lighter than it was, being made of steel, so that there is greater strength in a smaller space. The frame is little more than 5 ft. long by 2 ft. 4 in. wide, the two cylinders being 7½ in. diameter, with a 9 in. stroke working on to a crank shaft, which by a very simple arrangement drives the pinion which gears into the slots of the cutter-wheel. The latter is made of fine cast-steel, carrying on its outer edge 20 steel picks or cutters, making about six revolutions per minute, so giving 120 strokes per minute, making a clean cut 3½ ft. deep by 2 ft 3 in. thick, sweeping out the whole of the coal as it revolves; but a machine can be made to undercut 4½ ft. As before stated, compressed air is the best as most economical motive-power, and the long-wall system of working the best suited to the machine. With a working pressure of 27 lbs. of compressed air per square inch the machine has holed in very tough material 30 yards an hour. When it is taken into consideration that a machine will cut more coal in a given time than more than a dozen men it is surprising that coal-cutters, so easily worked as they are, and inexpensive as well, only requiring one man to look after each machine, with another to follow for the purpose of putting in the timber supports. Considering, too, that so many lives are lost (almost weekly, indeed) from falls of roof one would have thought that a machine which would so greatly lessen the danger from falls has not received more attention on the part of mineowners, for the safety attending them is not a slight recommendation, but should be included amongst their many advantages as compared with hand labour.

THE MOTIVE POWER OF THE FUTURE.

A short time since an article appeared in the Journal on the "Duration of our Coal Fields," in which we pointed out that so rapidly increasing was the consumption of coal that our supplies of that most valuable of minerals would in all probability be exhausted much sooner than many people anticipated. At the late meeting of the British Association the same subject was taken up by several gentlemen, including Sir W. THOMSON, Sir G. ELLIOT, and others, all of whom agreed that our coal fields were being depleted at such a rate that it was time we were considering what other sources of energy were left that could be made available for the production of mechanical effect. So far as regards fuel required for household purposes we do not see how any change can be made, or a substitute found for coal; but at the same time appliances may be brought forward for economising it, and preventing the present large percentage of its heating power from being sent into the air and polluting it, as is the case at the present time. Still, as the consumption in our households is likely to increase in something like the same ratio as the increase of population, the present requirements for domestic purposes, to say the least, are not likely to be much diminished, even admitting that gas for cooking and for heating rooms may be far more extensively used than it now is But the great drain there has been going on for several years for steam purposes is what has principally to be looked at, and if possible prevented from extending; otherwise, at no distant date, the districts now supplying the largest amount of coal, for manufacturing purposes in particular, are likely to assume their primitive pastoral appearance, with a sparse population as opposite as possible from the present one. But there are certain adjuncts that can be made available for diminishing the consumption of fuel as a motive power, and in doing away with it altogether for many purposes. These may be put down as electricity, air, sun heat, and water. Electricity has made immense progress in a very short time, and it is not so long since there was a lengthy discussion as to the possibility of dividing the electric light. Not only has this been now accomplished but the fluid itself can be stored up, made portable, and so carried from one place to another with as much ease as the carriage of an ordinary box or parcel.

The discoveries so far made in electricity have been most startling, even amongst those who have studied and experimented with electricity, for so able an electrician as Sir W. THOMSON stated the other day that Mr. FAURE'S accumulator was an aspiration "which he scarcely expected or hoped to live to see realised." If such great things have been accomplished in such a short time what may we expect in the not distant future in the application of electricity for many purposes for which it is not now considered applicable. But electricity has itself to be produced by some other motive power, and that at present must be either coal or gas, so that not the least important problem now to be solved is as to whether there is any other means by which it can be generated, so as to be independent of our rapidly exhausting stores of coal. It was suggested that water, or the utilising of the tides, would be found sufficient, but this was ignored at once by Sir W. THOMSON as impracticable; but he considered that the old windmill could be made to supply the power required, although he admitted that windmills, as hitherto made, were costly machines. But it was probable that windmills or wind-motors, in some form or other, would again be in the ascendant, and that wind will do man's mechanical work on land at least in proportion comparable to its present doing of work at sea. Sir W. ARMSTRONG, who has devoted a great deal of attention to the coal question and the likeliest substitute for taking the place of coal as a motive power, has suggested that the rays of the sun might be made to do the work now performed by our fossil fuel. He stated that the power of the sun's rays was sufficient, he estimated, as being equal to melting a crust of ice 103 ft. in thickness over the whole surface of our globe in the course of a year. The mechanical equivalent for the melting of a pound of ice was 109,982 foot pounds, so that the solar heat sufficient to melt a layer of ice 85 ft. thick, and an acre in extent, would be about equal to 4000-horse power for something like nine hours every day. But here we are met with the practical question—how are we to utilise the rays of the sun? And if the necessary apparatus can be found what will be its cost? To this Sir W. ARMSTRONG says that whenever such apparatus is forthcoming we may expect to bring into subjection a very considerable proportion of the 4000 invisible horses which science tells us are to be found within every acre of tropical ground.

Compressed air is fast becoming an important motive power, more especially in connection with mining operations, and it is also utilised for surface works as well. A good deal of the power, however, is lost, as is the case with the steam-engine, but as yet it is in what may be called its infancy, and has been greatly improved during the last two or three years. Its value will no doubt be much greater than it is now, and will be the means of economising fuel in the production of motive power, and thus tend to lengthen the time before our coal can be anything like exhausted. Water is a good and reliable power in the working of machinery, but can scarcely be compared to steam, but may yet be made to do duty instead of coal, seeing that it is easy of application, inexpensive, and does not require any other agent to assist it. It will be seen that there are various methods which can be utilised for taking the place of coal in producing the motive power for our machinery, although the best and most practicable means for applying them have yet to be discovered. Air, which is so valuable to our sailing vessels, and costs nothing, may be made of greater importance than it is now considered in connection with our manufactures, and the windmill, which has been looked upon as a thing of the past, may again be brought into requisition on a much larger scale than ever. But we are of opinion that most reliance is to be placed on electricity as the principal motive power of the future, for from it can be evolved a vast amount of heat, which we believe there will be no great difficulty in utilising, and that it is destined to replace coal for manufacturing as well as for other purposes for which power is required, we think admits of but little doubt.

NEW ROTARY STAMP MILL.

It being of paramount importance to all connected with mining, and especially with gold mining, enterprise that results should be obtained as quickly as possible, machinery which can be readily transported and set up, and which will permit of the handling of a large quantity of ore, would appear to be precisely what the miner and the shareholder require. An entirely new rotary stamp-mill, the invention of Mr. J. M. Stuart, a Canadian of long practical mining experience in the United States, Mexico, and elsewhere, and now of Queen Victoria-street, has been in operation in London during the week; and, both from the manner in which it does its work, and from the favourable opinion expressed with regard to it by practical men, it is not doubted that it will prove as effective in the treatment of the Indian gold ores as it has already proved in America. The new mill consists of a series of conical rollers, kept in motion by a rotating plate formed of a series of inclined planes, so that the ore is subjected to a crushing action while the roller moves along the plane, followed by a sharp stamp-like blow as it passes from one plane to another. In this way a large quantity of work is done with very little power, every particle of ore is brought into contact with the mercury, which, however, is protected from the grinding action, and all the free gold contained is taken ont.

The advantages of the mill are numerous. Practical men consider it to be the most practical mode of treating gold ores. The mill is simple, and not liable to get out of repair. It can be put up in 24 hours. The ore is amalgamated by one operation, with small loss of quicksilver, which is not liable to triturate. It is claimed that it is only one-half the price of the usual mill, and does its work better. The parts are very few, being in fact only the cylinder or battery, upon which the false bottom revolves; the five conical stamps placed upon it, and which are moved by the plate, revolving in an opposite direction; and the very simple gearing which completes the whole. All the available portions of the mill are crushing at one time, so that the utmost speed is obtained, and as it is on the principle of a Mexican arrastra, which is no doubt the best and least expensive mode of obtaining gold, its success is guaranteed by the inventor. It should be seen by all contemplating the erection of machinery, and as the heaviest part need not exceed 5 cwts. it will be invaluable in many places beyond the reach of other descriptions. An illustrated description of the machine will appear in an early Journal.

THE AMERICAN TIN TRADE—STATISTICS OF TIN

Aug. 1.—Stock in all hands, New York, Boston, and Philadelphia .....Tons			1800
Imported during Aug., Straits and Malacca, into New York	572		
" " Australian,	"	50	
" " Billiton and Banca	"	3	
" " L. and F.	"	35=	660
			2460
Consumption—During August .....Tons			800
Total spot stock			1660
Afloat to date, Straits and Malacca, May, June, July, and August shipments, per sail.....Tons		410	
Ditto May, June, July, and August, per steamers		1090=	1500
Totals in all hands, spot and afloat .....Tons			3160

The improvement in nearly all branches of our metal trade, referred to in my last circular, has made further progress throughout the past month, values having gradually advanced, and the volume of business considerably increased, transactions having been strictly confined to the legitimate demands of our consumers. The prospects for an active fall trade are extremely favourable, and with our stock of all metals considerably reduced it is reasonable to expect a general appreciation in values. Immediately at the opening of the past month the demand for pig-tin was actively resumed, all offerings on the spot being rapidly absorbed by our dealers at from 20½c. to 21c. per pound, and every parcel afloat up to September steam shipment was taken up at from 20½c. to 20¾c. for Straits and Malacca. The total transactions during the month probably exceeded 1400 tons. These large operations have had the effect of concentrating our visible supplies both spot and afloat, in a few powerful hands, who have by these means gained the control of this market at a period when, as is well known, stocks in the hands of consumers and out of town dealers are extremely low, and when we have to look for the most active period of our consumption. These large operations have no elements of speculation about them; they are simply based upon the knowledge and convictions of those experienced in the trade, that we have for some time past reached the point where the consumption of the world has more than overtaken the production since the discovery of tin in the Australian colonies, and that consequently we shall see the European stocks gradually but surely diminish in the same proportion as our available supply has decreased since the beginning of this year.

The Eastern markets have been very strong throughout the month, Singapore advancing steadily from $28¾ to $29¼ per picul, making the cost of importation to this side fully 21¼ c.; during the past few days, however, a slight reaction has taken place, so that now tin could be laid down here at 21c., which, however, could not reach us during the fall months. The shipments from the East during the month of August to this side have amounted to 880 tons, of which 720 tons

were by steamers and 80 tons by sail, the export to Europe having been *nil*. The London market showed great strength during the greater part of the month, prices for spot averaging rather over 91*l.* per ton until within the last few days, when owing to the unexpected advance of the rate of discount by the Bank of England to 4 per cent. a sudden collapse took place to 89*l.* which, however, was followed by an equally rapid reaction during the last few days, closing strong at 90*l.* 10s. spot, 91*l.* 10s. futures. Subjoined are the figures of importations and floating supplies during the first eight months of the present year, as compared with the same period last year:—

Arrivals in New York and Boston, Jan. 1 to Sept. 1:—	1881.	1880.
Straits and Malacca ..... Tons	3882	6605
Australian	517	990
L. and F. and refined	160	705
Banca and Billiton	91	1215
Total ..... Tons	4650	9515
Afloat on September 1—		
Straits and Malacca ..... Tons	1500	1675
Australian	unknown	100
Billiton	"	30
Total ..... Tons	1500	1805

Our closing prices to day are buyers at 20⅞ c. for Straits and Malacca on spot, and to arrive 21 c. asked. Singapore quoted $28·75; Penang, $28½. Exchange on London, 3s. 9⅛d.; London is firm at 90*l.* 10s. spot, 91*l.* 10s. futures.—*New York, Sept.* 1. EDWARD P. WHITE.

AN EXTRAORDINARY COPPER DEPOSIT.

he production of nearly 24 tons of copper by a single mine in four days appears to those accustomed to the usual speed of mine development and to ores of the usual character, so extraordinary that the public may well be excused for having demanded very conclusive evidence before accepting the statement as indisputable; yet that this was absolutely done at the Copper Queen Mine, in Arizona, has now been satisfactorily established. It was shown last week in the letter of Mr. F. M. F. Cazin, M.E., an old and valued correspondent of the *Mining Journal*, that on July 30 the company shipped 125,000 lbs. of copper, and the superintendent at the mine reported on July 22 that in the preceding four days the furnace had produced 53,373 lbs. of copper, that one level was producing ore which went to the smelting furnace without any assorting; that another was advancing nearly half a fathom a day in about 25 per cent. ore, and that the face then averaged 30 per cent.; whilst in a third they had advanced 15 ft. in carbonate ore, averaging 30 per cent. Such results are indeed almost incredible until the ores themselves are examined, when all doubt is at once removed to give place to the question—What will be the effect of the development of such an extraordinary deposit upon the copper market generally? For the present, however, this need scarcely be considered, for the copper being of a specially fine quality, its complete conductivity making it available for electricial purposes, a contract has been entered into extending over a period of twelve months, which will absorb the entire production.

Under these circumstances the examination of the large collection of the Copper Queen ores at the offices of the La Plata Mining and Smelting Company), 21, Great Winchester-street, City, is particularly interesting. The samples which it is understood have been taken entirely without selection, include as rich green and blue carbonates, silicates, and oxides of copper as have been seen in this country, the stones themselves having come apparently from a lode yielding large and unusually rich nodules of carbonates, and rich and heavy masses of oxide, whilst there is an entire absence of sulphide and such complete freedom from arsenic and antimony that the resulting ingot is equalled only by the copper from the celebrated Calumet and Hecla Mines, on Lake Superior. It has already been mentioned that the ore assays 30 per cent., which is quite probable, since many of the stones shown would certainly give 5 or 6 per cent. above that figure. Some of the vughy stones are especially beautiful, the small acicular crystals in the cavities being particularly brilliant and attractive, whilst in another specimen which we noticed the crystallised carbonate of lime covers the copper, so as to give the stone a very fine appearance. The ores form their own flux, the only care necessary being to mix the several classes in proper proportions, and are simply thrown into the furnace and smelted, the resulting ingot averaging 97 per cent. fine, and, therefore, commanding a ready sale at the highest prices. The development of the property can scarcely fail to yield a handsome fortune to those connected with it, and it will certainly well repay any one to examine the samples which are now in London.

THE IRON ORES OF IRELAND.—Some highly interesting Notes on the Tertiary Iron Ore Measures, Glenariff Valley, County Antrim, have been recently read before the Royal Dublin Society by Mr. PHILIP ARGALL, and these have now been printed separately in pamphlet form. He considers the true nature of the iron ore deposits has still to be learned. In connection with the Glenariff district he has never found the ore of the same quantity and quality on both sides of a dyke, and from what he can learn the same thing occurs in other mines; as a rule, a good seam occurs on one side only, which is generally the east side. To him this appears important, as a similar phenomenon is found in standing mineral veins when the elvans or cross-courses appeared to act as a stop the filling material. Thus in the case of the pisolitic ore seam it would appear that the dykes which stopped at the roof acted as a sort of stop for the material which constitute the ore seam. The pisolitic ore is neither baked nor displaced by the majority of dykes which stop at the roof; while nearly invariably it is displaced and indurated by the dykes which penetrate the roof from which it would appear that the pisolitic ore was formed prior to the latter and subsequent to the former. Yet the relation between the iron ore and the lignite would suggest the accumulation to be lacustrine. But, on the other hand, the pisolitic iron seam is not of even thickness, and is often absent over large areas, also its thickening on one side of a dyke and not at the other; the pisolitic structure being well developed in one place and scarcely discernible in another, and the largest pisolites being always found next the roof, decreasing both in size and number as we descend from it, are facts difficult to explain in a lake deposit. As, however, none of the eminent authorities who have written on these horizontal seams have put forward a theory that satisfactorily account for those peculiarities in their accumulation, it would, he considers, be presumption in him to do so. The paper is readable and instructive, and reflects much credit upon the author.

WELDLESS RING-PLATES FOR BOILERS.—Mr. J. WINDLE, formerly with Messrs. Bessemer, of Sheffield, and late of the Railway Steel Plant Works, Manchester, has just designed and patented a mill to roll weldless ring-plates for boilers from 2 ft. in diameter up to 14 ft. and 4 ft. wide. The object of the invention is to avoid the longitudinal seams in boilers, which are necessarily a source of weakness, and this is accomplished by constructing the shell of the boiler of metal rings connected together, and formed by a rolling operation from an ingot of steel, or from a bloom or mass of metal, in a similar manner as when rolling railway tyres, the ring being formed without a joint, seam, or weld. In the rolling-mill, which has been specially designed for this work, a fixed and a movable roller, adapted to roll the required rings, are employed. The axles of these rollers are provided with top bearings, and to enable the ingot ring or mass of metal to be placed in position and the rolled ring to be removed, the upper bearing of the movable roller is arranged to be withdrawn. This bearing is fixed on the outer end of a lever or lever frame, which is hinged to a sliding standard or carriage, connected with the carriage which carries the movable roller, the sliding standard being actuated by means of hydraulic cylinders. Vibrating frames are also employed, each carrying two, three, or more rollers in place of one, the upper ends of the studs or shafts being stayed. A number of the carrying rollers are connected by means of bevel or suitable gearing with revolving shafts, so that they assist in the carrying round of the ring. In carrying out this method of rolling a hole is punched in the ingot or bloom, and a mandril introduced. The mass of metal, with the mandril in position, is then placed under a steam hammer in a swage, which is formed to confine the metal sideways, so as to produce an extension of length under the blows of the hammer, until a rough cylinder of sufficient length is obtained; but in some cases the ingot is cast in the form of a hollow cylinder, which when necessary is elongated in the manner above indicated. These ring-plates can be produced in any required shape, and with flanged or thickened edges if necessary, and we understand that a company is being formed to put down the necessary plant for the manufacture of boilers and plates on this principle.

REPORT FROM CORNWALL.

Sept. 15.—The upward movement in the tin standard we predicted as imminent in our last has not long been delayed, commencing on Saturday with an advance of 3s., the most decided step that has been taken for some time past. This, however, by no means satisfies us, nor shall we imagine that prices have reached their true level until the two figures have been exchanged for three. This in all probability will be the work of the closing months of 1881 if the market is allowed to have its free course. But, indeed, the day of speculative interference to any serious extent seems for the time at least to be over. We are likely to have a very active share market for some little time to come.

Though some exception has since been taken to what may be regarded as outside details (in no way affecting its technical and practical value), we are inclined to regard the information concerning Mount Bischoff, laid before the Miners' Association at Falmouth, from Capt. Davey, as the most important that has yet reached this country. The description was that of a man who knew what he was talking about, and it was so supplemented by photographs and specimens as to make it doubly valuable. It is perfectly clear that we shall have to reckon with Mount Bischoff for some time yet, at its present rate of returns, but it is equally clear that profitable tin production is now confined to a very limited area, and that the alluvial deposits still worked show a steady decrease towards extinction, though some of them no doubt, as Mr. Westley said at North Levant, will last for years yet.

The deposit at Mount Bischoff occupies a somewhat anomalous position, to which we have apparently nothing quite analogus in this country. It is certainly not alluvial in the ordinary sense of that term, neither is it what we should call a lode. It is a highly stanniferous deposit of coarse iron ore, worked by open cutting, which may have originated in one of several ways, but the extent of which is capable of approximate calculation. Beyond this no lode has been discovered, but we are very much mistaken if some of the remarkable specimens of water-worn highly crystallised tin ore which accompanied the paper do not indicate the existence of lodes, at least of *stockwerk*. If so, as we cannot imagine that denudation has cleared all the tin-bearing rocks away, some time or other true lodes will be found. But what then? A point which seemed almost altogether to be overlooked in the discussion on the paper was the relative cost of mining as compared with streaming or open working. Incidentally this had, however, received such ample illustration in Captain Davey's remarks that it is perfectly certain when Australia or Tasmania take to mining Cornwall will have nothing to fear, for with cheaper labour, and more perfect and less costly worked machinery, it will be able to beat them hollow. Nothing can be more reassuring.

Perhaps one of the best things that can be done at present with regard to the Employers' Liability Act is for the miners, if they have to act individually, to avail themselves of the principle of assurance, but cannot joint action be taken? We would earnestly press this matter for early consideration on the Mining Institute.

The wisdom of calling in question the decision of the judges at the recent Polytechnic Exhibition has been rendered more than doubtful by the correspondence which has since passed, and perhaps the smallest notice taken of it the better. It is only fair, however, to point out that the Polytechnic has been the main agent in introducing boring machines and compressors into the county, and that for years trials of borers formed a prominent feature at its annual meetings. Moreover, it is a fact that the Polytechnic judges of this branch of mechanics include men of the highest eminence in mining matters in the county; and it is stated on authority that both of the exhibits in question were fully and fairly tried by them. That both compressor and borer worked steadily and well is certain; but if the judges failed to recognise improvement on machines at present in use in the county, they cannot be charged with more than error of judgment, and that would have to be argued.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Sept. 15.—This week the pig-iron market is decidedly stronger. Some medium quality sorts are firmer by 1s. 3d. to 2s. 6d. per ton. This is attributed to the effect upon the South Staffordshire market of the negociations going on between the Scotch and Cleveland makers. The benefit which would result from a resolute curtailment of production by those makers could not be confined to the northern part of the kingdom alone. Hematites likewise manifest more strength, and consumers finding that the tendency is decidedly upwards are showing less indisposition to operate. To-day in Birmingham Tredegar hematites were quoted at 65s., Ulverston hematites at 66s., and Barrow hematites at 67s. 6d. South Staffordshire all-mine pigs were 3*l.* 2s. 6d., and one or two brands as high as 3*l.* 5s. Shropshire all-mine pigs were 3*l.*; native part mines were 2*l.* 10s. Stocks of pigs are decreasing, and makers express the belief that this feature of the market will continue. Manufactured iron makers report themselves still full of work, and sheet and hoop makers were not caring to book much more yet awhile, since they have two or three months' work ahead. As to both these descriptions, this week's mail from New South Wales is reported to have brought some good orders. The marked bar makers are doing slightly more at 7*l.* 12s. 6d. to 7*l.* per ton. No reliable bar is now to be had under 6*l.*, which is a rise of 5s. per ton upon two months ago. Tin-plates are in steady sale on export account, but prices continue below what they should be.

On Wednesday the South Staffordshire Mines Drainage Commissioners formally accepted the offer of the Star Life Assurance Company to lend to the Commissioners on the security of the general or surface drainage rate 10,000*l.*, at the rate of 4½ per cent. interest per annum. The loan is to be paid off by fourteen yearly instalments of 714*l.* 5s. 9d. each. The Commissioners also heard appeals against the general drainage assessments for the ensuing six months. Of the sixteen appeals nine were settled out of Court, and in most of the remaining cases reductions were granted. Nearly all the appellants based their claim on the fact of decreased output occasioned by the presence of water and by trade depression.

A meeting of Messrs. John Bagnall and Sons (Limited) was held in Birmingham, to confirm the resolutions which were carried at the meeting on Aug. 25, authorising the directors to increase the nominal capital of the company from 192,000*l.* to 222,000*l.*, by the creation of 10,000 new shares of the nominal value of 3*l.* each, to be denominated "preference C shares." The Chairman explained that, although there was only a small attendance, the directors had received 11,000 proxies in favour of the confirmation of the resolutions, and only two proxies against it from gentlemen holding ten shares each. The resolutions were confirmed.

A meeting of the South Staffordshire Mill and Forge Managers' Association was held at Dudley, on Saturday, when Mr. W. Farnworth presided, and there was a fair attendance. After the formal business Mr. William John Hudson, Associate in Physical Science, of Woodside Ironworks, read a paper on Combustion. The first part of the paper dealt with a chemical definition of the term, with illustrations; and the latter part showed the heating powers of various kinds of fuels, and showed that complete combustion in furnaces depended on the proper admittance of the exact amount of oxygen. A discussion, in which Messrs. Rigby, Edwards, Yeomans (secretary), Matthews, and the Chairman took part, followed the reading of the paper. The result of this was a general belief that too great an admission of air or a careless use of the means to admit oxygen would oxidise the iron; and Mr. Hudson pointed out that the happy means was the thing to be striven for. Upon the question of wasted power in the shape of smoke from stacks, Mr. Hudson recommended frequent firing and the feeding of the fire on one side only at a time. By this means the fuel would soon be incandescent, and only half the smoke would arise all day. The Chairman advocated firing so that the great mass of red-hot fuel should be regularly pushed towards the back, and then the smoke from the new supply in the front would have to pass over the glowing coals, and so be partially consumed.—A vote of thanks was passed to Mr. Hudson for his paper.

TRADE IN SOUTH WALES.

Sept. 15.—The coal shipments for the month of August at the port of Cardiff amounted to 480,020 tons, against 503,628 the previous month, which was the largest quantity shipped in the same period in the history of the port. At Newport the amount was 105,461 tons, at Swansea 62,013 tons, and Llanelly 5300 tons. The amounts exported for the eight months ending August were:—Cardiff, 3,650,039 tons; Newport, 757,630 tons; Swansea, 520,383 tons; and Llanelly, 41,827 tons. Of patent fuel Swansea stands first with a shipment of 148,054 tons, while Cardiff has only exported 71,399 tons. As regards coke, Cardiff has exported 8183 tons, Swansea 6606 tons, and Newport 2898 tons. The amount of coal exported last week at Cardiff was 101,966 tons, while Newport sent away 13,546 tons. The steam coal trade is not so active as it has been in the previous months of the year, but all new contracts are made at a higher figure than before, as it is felt that before the expiration of the year 1882 there will probably be a rise of as much as 7½ per cent. in colliers' wages. The pit owners in their present mood would rather close their pits for one or two days a week, and thus reduce the output, than make any further concession in prices. The amount of iron shipped at the South Wales ports in the eight months ending August were:—Newport, 131,839 tons; Cardiff, 92,849 tons; Swansea, 6494 tons. The amount shipped last week at Newport was 2812 tons, and at Cardiff 2808 tons. The sale of the Garth Chain and Anchor Works, which are situated about six miles from Cardiff, took place on the 9th instant to Mr. Strawson, of Birmingham. These works originally cost 38,000*l.*, but the price which is paid for them by Mr. Strawson has not transpired. On the 10th instant the plant and machinery were sold, and the event brought together a large number of people from all parts of England and Wales. Satisfactory prices were realised. Mr. Phillips has sold the Blaina Ironworks to a company which has been registered with a capital of 100,000*l.* The men at the Parkend Tin-Plate Works, in the Forest of Dean, are now working under a day-to-day contract, but the encouraging nature of advices from the United States gave rise to the hope that a more permanent condition of things will shortly take place. The Llanelly Tin-Plate Works have been re-started under favourable auspices. There is a decided improvement in this industry.

THE SALE AT GARTH WORKS.—The sale of plant and machinery at these works, commenced on Thursday, by Messrs. Farebrother, Lye, and Palmer, Mr. Palmer officiating, was concluded on Friday, There was a large attendance, and good prices were realised on both days. Amongst the principal buyers were Messrs. Andrews and Baby, Mr. James McPherson (Lydney), Messrs. John Williams and Son. Mr. C. D. Phillips, Mr. P. S. Phillips, the Coedcae Colliery Company, Mr. S. Andrews, Messrs. Brum, Lennox, and Company, Mr. Strawson, Mr. Billups, Mr. H. W. Lewis, Mr. Childs, Mr. Shepherd, the Cambrian Fuel Company, Messrs. J. S. Hollyer and Company, Mr Climes (Bedruth), Mr. Hepburn, Mr. Thomas Aston, Mr. Rowlands (Pengam), Mr. J. W. Morgan, Mr Snape, Mr. J. W. Morgan, and Mr. Matthias. A Nasmyth steam-hammer, 6 cwt. fetched 18*l.*; a 20 cwt. Nasmyth steam-hammer, 50*l.*; a 50 cwt. Nasmyth steam-hammer, 132*l.*; and a steam shearing machine, self-contained cylinder, 7 in. diameter, 12 in. stroke, making 100 revolutions per minute, equal to 9 horse-power, 40*l.* A crane realised 25*l.*, turntables 23*l.* each The scarf shears in the link-bending shed was sold for 73*l.* In the engine-house a horizontal engine, cylinder 22 in. diameter and 3 ft. stroke making 38 revolutions a minute, equal to 78 horse-power, brought 170*l.* Another horizontal engine, 82 horse-power, sold for 175*l.* Water tanks realised from 28*l.* to 38*l.* Boilers sold at 62*l.* A strong 13½ in. self-acting, double-geared, sliding, surfacing, and screw-cutting lathe, by Collier, Manchester, brought 80*l.*; and from the fitting-shop there were also sold a planing-machine lathe, 7 ft. long by 2 ft. 1 in. wide, width of standards inside 2 ft. 9 ½ in., self-acting in horizontal and vertical movements, for 40*l.*, as well as a drilling machine for 46*l.* A horizontal engine, by E. Page and Co., 12 in. in diameter and 2 ft. stroke, at 80 revolutions per minute, equal to 32 horse-power, sold for 67*l.* 10s. The varied apparatus in the heating-house realised 61s. 6d. per ton; and a 20 ton railway weighbridge brought 50*l.*—*South Wuels Daily News*

TRADE OF THE TYNE AND WEAR.

Sept. 14.—The general state of the coal and coke trades continue to maintain the healthy tone we have noted over the last few weeks. Business has been to some extent retarded by the detention of vessels owing to bad weather in the North Sea, but, on the whole, business is pretty vigorous. Orders for steam and other coals come to hand pretty regularly. The market is quite clear of speculation, but the shipments of nearly every description of coal are larger than they were in the corresponding period of last year or of the year previous. There is little fluctuation in prices; no attempt has been made by the colliery owners to raise them artificially, and the basis of business appears to be establishing itself entirely upon the natural laws of demand and supply. The injurious system of consignments is not heard of at present. The shipments of coal and coke at Tyne Dock have been nearly about an average. During the present week there has been a good supply of vessels, and all branches of the staple trades of the district have been active. A very steady business has been transacted in Northumberland steam coal; for Durham gas coal there is an active demand, and house coal on these rivers is improving in value. The owners of the Hilda Colliery, South Shields, have issued a circular stating that their price for house coals will be in future 10s. per ton, which is an advance of 6d. per ton. Other coalmasters will, no doubt, follow their example. We learn from Browne's Export List, just published, that the coal and coke shipped from the north-eastern ports in August, 1881, exceeded considerably the shipments in the same month last year. The total shipments are 1,221,803 tons in August, 1881, against 1,106,055 tons in August, 1880, being an increase of 115,748 tons.

A mass meeting was held at Horton on Monday in order to discuss the vexed rent question, which has been agitated for a long period. Mr. R. Fynes was voted to the chair, but Mr. Burt, M.P., was the principal speaker. He thought that it would be better, and the men would be placed in a more independent position if they had houses of their own; but as this position has not yet been attained he opposed the present system, as the bulk of the men are provided with houses, while a considerable number, about 1800 men, were paying their own house rent. He stated that some of the coalmasters had promised that when the average price of coal reached 5s. 6d. per ton they would then allow these men 1s. 6d. per week as house rent. He was glad to see that there was some agitation about this matter, and he thought they ought not to rest satisfied until it was put right. He was, however, bound to observe that they ought to have convened the meeting through the ordinary channel of the Mine Association. He advised them to remain united, and watch the first favourable opportunity of settling the matter.

There has been much excitement in the pig-iron trade during the past week. This has been mainly caused by the accounts of stocks giving the increase for August as only 507 tons, while an increase of 12,000 tons at least was expected. There has been considerable animation in the trade in consequence, and a good deal of pig-iron has been sold. Makers have sold heavily for delivery up to the end of the year. The price of pig-iron still remains low, the highest price touched for No. 3 being about 38s. As heavy stocks are held both in Cleveland and Scotland the make of pig-iron must ultimately, as has been so often urged, be materially reduced. It will be recollected that two months ago a proposal was made by the Cleveland ironmasters to the Scotch masters to join in a movement for reducing the number of furnaces in blast in both districts, but the Scotch masters declined to enter into an arrangement of this kind. It is, therefore, rather singular that the Scotch masters have within the past few days arrived at the conclusion that a reduction of the work is absolutely necessary, and they have resolved to make a proposal to the Cleveland masters for a reduction of the make in both districts. It is stated by a Glasgow correspondent that the demand of the Ayrshire miners for an advance in wages has had some in-

fluence—has, in fact, induced the ironmasters to make the proposal that one-tenth of the 111 furnaces making g.m.b. shall be blown out if the Middlesborough makers will do the same. At Middlesborough on Tuesday the market opened very firm, and the ironmasters held a meeting and decided to confer with the Scotch ironmasters on the question of blowing out furnaces. The quotations for No. 3 was 38s., and 37s. for No. 4 forge. Manufactured iron is very firm, and plates are 6*l.* to 6*l.* 2s. 6d.; bars, 5*l.* 12s. 6d.; angles 5*l.* 12s. 6d.

P.S.—As I have shown above that the Coal Trade here is gradually getting brisker—the demands for most kinds of coal has improved considerably of late and prices are advancing, House coal of first-class quality has been advanced 6d. per ton during the present week. The improved state of this trade has not been brought about by restricting the output or any artificial means; it appears to be due to the gradual increase in the demand, which has now more nearly approached the output. There has been a great demand for tonnage in these rivers in the present week, and freights to Cronstadt and some other foreign ports have risen considerably in consequence. The position of the Iron Trade is not so satisfactory; since the period when large stocks were accumulated of pig-iron in Scotland and Cleveland this trade has been agitated at certain periods by speculation; the bulls and bears have become quite as prominent in connection with this business as they are on the Stock Exchange. There has been much talk this week of the scheme for reducing largely the make of pig-iron in Scotland and Cleveland simultaneously, and various opinions are expressed as to the result of such an arrangement. It is quite possible that if this is carried out it may lead to rapid inflation of the trade and future fluctuations and complications. If the makers who lately found that they could not make iron at a profit had gradually reduced their make until the demand had met it, a more healthy state of business would most certainly have resulted, and such a course would have tended to bring about a steady healthy trade in iron. The manufactured iron trade has been very firm this week; ship-plates and most other kinds of finished iron have a rising tendency.

REPORT FROM DERBYSHIRE AND YORKSHIRE.

Sept. 17.—The Magpie Mine is now fast getting into gear, and it is to be hoped that the spirit shown by the company will meet with the success it deserves. An outlay of something like 18,000*l.* to clear the water and prevent its future accumulation was certainly a bold stroke, but there is every appearance that it will meet with the reward it so richly deserves, for there are valuable reserves of ore that will now be worked without much difficulty, so that the mine should take a high place amongst the few in Derbyshire that are now making for the owners a fair profit on the outlay. In 1872 the Magpie Mine, so far as regards the production, stood third, coming after the Millclose Stoop and the Bage, and next year there is every reason to believe it will be second only to the Millclose, which has been the finest mine in the county, and the most completely fitted with the best of machinery and mechanical appliances, and it is only by having such that lead mines can be expected to pay.

Ironstone mining in Derbyshire is not now much looked after, for iron masters find that it is to their advantage to get the ore from Northamptonshire, where the royalty is low, and the mineral found at the surface, not requiring miners but labourers to dig it. The consequence is that the county named has now become second only to Cleveland for the production of iron ore, but it excels a good deal in richness of metallic iron. The iron trade is still comparatively quiet, and considerable stocks of pig are held, but these it is expected will go off quickly should the makers in Cleveland lessen their productions, as it is said they are about to do. In finished iron there has been no change, the demand being still quiet for rolled material. The steelworks at Dronfield continue busy, large orders being in hand for rails, but the place is much exercised by the fact that the works are about to be removed to Moss Bay, in Cumberland. This is in a great measure due to the charge made by the railway companies for the conveyance of rails to shipping ports, which absorbs the profit, and places makers whose works are close to a seaport in a most advantageous position as compared with those whose establishments are far inland. At most of the collieries in North Derbyshire there has been an improved demand for house coal, and a larger tonnage than usual has been forwarded to London from Clay Cross, Grassmoor, and several other collieries.

Trade in some departments in Sheffield is not so brisk as it has been, but the heavy branches as a rule are still active. The Bessemer makers have plenty to do, a large proportion of the output being for the rail mills, whilst a good deal is also being absorbed in the production of armour plates, as well as for certain qualities of cutlery and tools. Railway material continues in good request, more particularly as regards tyres, axles, points, springs, and wagon wheels. Ordinary ship and boiler plates, as well as sheets, hoops, and bars, keep the various mills going. Crucible steel is in better demand, not only for tools, but for sheets and colliery corf wheels, the latter having made considerable headway of late, as they are found to be far more economical than the old cast-iron wheels so long in use. Cutlers are not so busy as they have been, and few orders of any magnitude have lately been received from the home districts. America has not been quite so good a customer of late, but some of our colonies and dependencies are likely to send in some good orders shortly, more especially for rails and railway material. The foundries in the district are busier than they have been, there having, although rather late in the season, been a fair demand for stoves, grates, and ranges. Amongst the specialities that have been most successful during the summer those of Crowley and Co. undoubtedly take the first place, the firm having taken first prizes for lawn mowers, chaff cutters, and other light implements of a similar character.

In South Yorkshire the coal trade has improved, and a heavier tonnage of household than has been the case for some time past has been forwarded to London during the last week or two. Steam coal has also been in steady request for shipment from Grimsby to the North of Europe, and several cargoes have also been sent from Goole to the Isle of Wight and several English ports. Prices, however, have not gone up at the pits, although in the London market the rates are now the same as charged during the greater part of last winter. There are now three large collieries belonging to limited companies standing without much prospect of their being re-opened just at present, whilst most of the men have been able to get some work at other places. A good deal of coke is being turned out, and meets with a rather ready sale for iron smelting, as well as for other purposes. Formerly the coke of the district was not thought much of, being of an inferior description, but during the last five or six years more attention has been paid to it, and the small coal being used it is washed and dried at some places before it is put into the ovens, and the result is that the coke is now made equal to that which is produced in Durham.

The efforts of the St. John's Ambulance Association to impart a knowledge of surgery sufficient for persons to aid in bandaging wounds, stopping hæmorrhage, and recovering those who have been all but drowned, has made marked progress in the mining districts of the West Riding, where colliery accidents may be said to be of daily occurrence. On Thursday Surgeon-Major Hutton visited South Yorkshire, and examined no less than 49 people who attended the surgical lectures at Warston Dale, near Barnsley. The meeting took place in the Memorial Hall, erected in memory of the late Joseph Mitchell, for many years the managing partner of the Edmunds and Swaithe Main Collieries. The proceedings excited a good deal of interest, and Mr. John Mitchell, of Swaithe Hall, was called to the chair, and briefly opened the business which had called so many persons together. The examination was then gone through, the chairman being one of those who had attended all the meetings of the class. In acknowledging a vote of thanks Surgeon-Major Hutton drew attention to the importance of persons, more especially those residing in mining districts, having some knowledge as to the treatment of wounds and other injuries. In the Afghan and South African campaigns 172 officers were either killed or died of their wounds, and 3028 non-commissioned officers and men, whilst from the Board of Trade Returns it appears that during 1880 there were 1136 railway passengers, railway servants, and others, killed, and 3958 injured on the various lines of railway in the kingdom; but in addition to these the companies had returned 45 persons killed, and 2733 injured from accidents which took place on their premises, so that there were more than three times the number injured on the various lines of railway and their premises of the United Kingdom in one year than there were wounded in the campaigns alluded to, and who could tell how many of those lives might have been saved by timely assistance, such as was recommended by the St. John's Ambulance Association. The Ambulance pupils have been the means not only of relieving pain and suffering, but of saving life as well. He trusted that another class would be formed in the locality, and that a class would be made up of ladies, for they would find that in being able to assist the injured by accidents, or the sick in their houses, would be a self-elevating work. Mr. Mitchell, in thanking those assembled for their vote of thanks passed to him as chairman, said the instruction he had received in attending the classes he had found most beneficial in more than one instance. Such instruction was no where more necessary than in a mining district, and he hoped the colliery owners in the locality would take more interest in the work than they had done hitherto, for it was one that ought to be encouraged and promoted in every way. The proceedings then terminated.

REPORT FROM NORTH WALES, SALOP, AND CARDIGAN.

Sept. 15.—During the last two or three weeks the Slate Trade has been very brisk at Portmadoc, and in order to facilitate the loading of the vessels at the wharves extra gangs of men have been put on. The demand for slate loading vessels also has recently been and is so great that captains have considerable difficulty in getting sufficient men to man their ships, consequently the wages of A.B. seamen have gone up after being for a long while very low; as much as 3*l.* 10s. is now given per month. Not only is the slate trade brisk at Portmadoc but at the Penrhyn Slate Quarries also, where it is reported that the men will recommence working full time after the next monthly lettings. The Midland Railway Carriage and Wagon Company, which we announced about the commencement of last year as having taken the works, buildings, and sheds erected for the Potteries and North Wales Railway Company, at Shrewsbury, adapting them for the purposes of their company, have recently finished the last of 20 trains of 10 carriages each for the London, Brighton, and South Coast Railway. The carriages are built from designs which have not hitherto been used, and the best material and workmanship have been employed in their construction, each carriage being also fitted with the Westinghouse brake and Shondly's electric arrangement, by which the passengers may communicate with the driver and guard. The rate of manufacture was about one train per month, and we understand that the same company are now turning out some goods trucks for the South-Eastern Railway at the rate of from 30 to 40 per week. Salop may well be proud of this her latest industry. We hear that the railway scheme for connecting Wrexham with Stafford, for which an Act was obtained some years ago, is to be revived.

The Liverpool Corporation advertise the letting of a contract for laying the portion of their water pipes stretching from Liverpool to Prescot. This gigantic water supply scheme is now at work in full swing.

When lead ore takes to talking we should expect some weighty remarks. Certainly those made by the sample from Nant-y-Cria in last week's Journal are more weighty than wise. It is difficult to understand why they were made, except to enable the writer to have a fling at the manufacturers of Birmingham and the politics in favour there. If the writer did not live so much in the far past with the great beasts, not to mention Aristotle and the old Greeks, he might know that spurious jewellery forms but a very small portion of the manufactures of that important town, and that the principles on which this great country has been governed, and by which it has prospered for the greater part of the last fifty years, have no need to be nicknamed "gas." It is, however, very gratifying to see the attention which is now given to Welsh mining in the columns of the Journal, and especially mining in Cardiganshire. Why do we not hear more from our Denbighshire and Flintshire friends?

I would not curtail Mr. Readwin's interesting letters, which are always good reading, but I would like to see him well at work in the Welsh gold district, producing the metal he loves—mineralogically—so well. When will he get into full work, and begin to reap the results of his long years of investigation?

ELECTRIC LIGHTING FOR COAL MINES.

An interesting paper detailing the application of electricity to the lighting of collieries was read before the British Association for the Advancement of Science, by Mr. Andrew Jamieson, of Glasgow. It will be remembered that in the discussion which followed the exhibition of Swan's lamp at the Society of Telegraph Engineers in October last, Professor Tyndall remarked that probably this form of incandescent lamp could be adapted for use in coal mines as a safety-lamp. Since then two practical trials have been made with that object in view, the one at Pleasely Colliery, near Nottingham, by Messrs. R. E. Compton and Co., in conjunction with Swan's Electric Light Company, about the middle of June; the other at Earnock Colliery, near Glasgow, by Messrs. D. and G. Graham, of Glasgow, for Mr. Watson, the proprietor, on Aug. 9 and Aug. 11. It was remarked that particular interest was being manifested by mine-owners, managers, and engineers to know the commercial value of the light, or, in other words, whether the possible increased light and safety of Swan's lamps over the methods adopted would result in an economy and in increased output of coal for the same expense of labour.

Mr. Jamieson reviewed in detail what had been done at Pleasley and Earnock Collieries, explaining the apparatus and appliances adopted at the latter by means of a large wall diagram. He showed working models of strong miners' lanterns encasing Swan's lamps, and of air-tight contact makers of various designs and patterns for preventing the inevitable spark which always takes place upon disconnecting leading wires or lamps from causing danger in a fiery mine. He pointed out and showed by calculation, and by sketches on the black board, that the plan of joining a number of Swan's lamps in single parallel, with a self-exciting Gramme, Siemens, or other form of dynamo machine, was neither the most economical nor handy for management, from the fact that the lamps required to be specially ordered, and made of a slighly decreasing resistance in proportion to their distance along the main leads from the generator, and that without a costly and delicate current regulator he thought there was considerable risk in spoiling the remaining lamps upon turning out a number of them. He said the plan of introducing an equivalent resistance to that of the lamps turned was equivalent to throwing away so much energy or coal, because the resistance so introduced absorbed power equal, in fact, to that of the lamp or lamps which it replaced. Finally, he gave several plans for joining up the lamps, which, in his opinion, were more economical and better, and he stated that by using Siemens' dynamo-exciters with their alternate current machines the danger accruing from suddenly turning out a number of lamps was avoided, as the electro-motive force remained practically constant with low resistance leads and generator coil, and, therefore, the current passing the remaining lamp or lamps was always the same. For example, if 49 lamps out of 50 were suddenly switched out of circuit, the remaining lamp would not be endangered, and would have the same current passing through it and give the same light as before. He reviewed in detail the most approved mechanical and electrical apparatus for installing electric lighting in coal mines, and mentioned that he had found by experiment that good Swan lamps will give forth light at the rate of 220-candle power per horse-power absorbed by them.

In the discussion followed the reading of the paper, Mr. T. R. Crompton remarked that the Pleaseley pit, though it might not be the best for the electric light, being well ventilated and safe, yet it was the most suitable for the first trial, which might be attended with danger. With the experience gained at Pleaseley, however, he was now attempting to carry out the lighting of Risca pit, one of the most dangerous in England. In order to ascertain whether it was possible to make lamps without further complication which could be worked with the most dangerous gases, experiments were about to be carried out at King's Cross. Mr. Swan explained that the miner's lamps shown were intended to be used by attaching branch wires to the main wires in the colliery. The continual attachment of those branch wires to the lamp was a continal drawback to its use. It limited the portability of the lamp, and necessitated long lines of conducting wire of considerable thickness, which were expensive and were also attended with a possible source of danger. At least it did not allow of the total elimination of the element of danger in connection with the accidental breakage of the wires. He had, therefore, thought that a completely self-contained and portable mining lamp would be an advantage, and he had on the table a specimen of such a lamp, for the construction of which he was indebted to the skill of Mr. Cunningham. This lamp could be kept lighted for six hours by two cells of Faure's secondary battery, weighing 10 lbs., and would give the light of one or two candles during that time. To charge the battery afresh it would only be necessary to place it for a time in connection with the wires of a dynamo near the pit mouth. The lamp and its attached battery need never come out of the pit, so that the objections raised to the lamp he had previously exhibited would be to a great extent removed. Sir William Thomson remarked that he considered the principle of incandescence *in vacuo* to be exceedingly valuable, and had no doubt that by its means the electric light will become the domestic and indoor light of the future. The question of economy must engage the attention of engineers. Sir William proceeded to demonstrate that comparisons between the incandescent carbon and the electric are not usually made properly, and he showed by calculation the economic value of the former. Sir John Hawkshaw suggested the use of electric illumination for travelling purposes; and Dr. C. W. Siemens, in proposing the vote of thanks to Mr. Jamieson, said that the paper dealt with a matter of great practical importance, and that when the question was put to him by the Coal Mines Commission, whether he thought the electric illumination of coal mines a desirable object, and whether it could be easily accomplished, he was unable to find a satisfactory answer to the second part. He saw great difficulties in the way; but they had been manfully dealt with, and there seemed to be a far greater promise and success than he anticipated. The great difficulty that presented itself to the mind of every electrician was that of the conductors. If a contact were accidentally made between two conductors a flash of light would ensue, which would fire the mine. The Faure battery, however, gave the means of storing electricity, and the miner could carry a store of energy as he carried his oil, sufficient for the working of an entire shift, without being hampered by the conducting wires. With regard to the question of Sir John Hawkshaw, he might rest assured that his object would be accomplished without the least difficulty. In his large tunnel he could get the electric light applied in almost any form; and as there was no risk of explosion, and the areas to be lighted were considerable, the application was a most desirable one.

CENTRIFUGAL VENTILATORS FOR MINES.

Mine ventilators acting on the principle of a pump have formed the subject of two papers by Mr. Daniel Murgue, engineer of the Bessigès Collieries, in Gard, South of France, in the Bulletin de la Société de la Industrie Minerale, and having subsequently been one of the three commissioners who reported on the ventilation of the mines of that district, he now contributes an interesting paper, in which he investigates the working of mine ventilators exhausting by centrifugal action. This paper, ably translated and abstracted by Mr. Alfred Bache, M.A., Assoc. Inst. C. E., is published among the "Other Selected Papers" in Mr. Forrest's volume. The characteristic features of centrifugal exhausting fans are their extreme simplicity, whether revolving vertically or horizontally, the free passage for the air through them from the upcast shaft to the external atmosphere, and the large air current they are capable of discharging from mines having large airways—all these are in marked contrast with the features distinctive of ventilators on the pump principle.

For investigating the theoretical efficiency of centrifugal ventilators in regard to the degree of vacuum they produce, the author recurs to his principle of "equivalent orifices." Thus, supposing the air-drift from the upcast shaft to the ventilating fan were closed by an air-tight sheet across its mouth, the revolving fan, though producing no current, would maintain an initial vacuum in the confined space of the drift. If now an inlet orfice of area a be made in the sheet, the effective vacuum of the current will be less than the initial vacuum by the amount of loss due to friction and eddies in the passage of the air current through the fan itself. Supposing the air discharged from the fan had to pass through an outlet orifice of area b in another sheet, presenting an obstruction equivalent to that encountered in its passage through the fan, then the obstructions presented to the ventilating current by the mine and the fan respectively are replaced by two "equivalent" orifices, a and b, in two imaginary sheets, between which the fan works.

The calculations given in the paper show that the effective vacuum is equal to $H - MV^2$; where H is the initial vacuum, M the constant factor obtained by dividing unity by $2g \times (0{\cdot}65b)^2$, and V the effective volume of air current per second. This equation presents the two-fold advantage that it dispenses with the necessity for calculating the equivalent inlet orifice, a, which represents the mine resistance to the pull of the ventilator; and that by plotting graphically divers pairs of experimental valves for h and V^2 (treating h, the effective vacuum, as the ordinate and the square of V as the abscissa), it can be seen at a glance, and with great accuracy, to what extent these fall in with the straight line represented by the equation. On these accounts the author strongly recommends the adoption of this method for general use in observations or experiments on the working of ventilators. The validity of his theoretical conclusion was tested by the author by means of the data furnished from experiments made by the Gard Commission upon three ventilating fans in that district. For each of these five different degrees of mine resistance were artificially presented to the pull of the fan, so as to cover the range of obstruction ordinarily encountered in mines having the smallest and largest airways; the speed of the fan, the effective vacuum produced, and the volume of air-current, were measured. From these data was calculated the area b for the theoretical equivalent outlet orifice from the fan; and the ventilating current was reduced to correspond with an exactly normal speed of 3936 feet per minute for the circumference of each fan. The five pairs of valves of h and V^2 where then plotted on a diagram; and the curve drawn through the five points so obtained was examined as to how nearly it was itself a straight line.

The first ventilator at Lalle Colliery, Bessèges, was a kind of turbine, of 12½ ft. diameter, without casing, but working in a sort of semicircular wheel-pit, and discharging the air all round; its inlets were 6 ft. diameter, and its width 4½ ft. at centre, narrowing to only 2 ft. at the circumference. The next, at Créal Colliery of the Bessèges Company, was 19¾ ft. diameter and 3½ ft. wide, with inlet 11½ ft. diameter, in a casing with a short parallel chimney. The third, also at Bessèges, was a Guibal fan, of 16½ ft. diameter and 6½ ft. width, with inlet 10 ft. diameter, in a casing with adjustable shutter and expanding chimney, but without the latest improvement in the way of radial vanes. With the Créal fan running at 63½ revolutions per minute, the five results accorded most closely with the foregoing theory, falling into a straight line without appreciable deviation. Against the highest mine resistance, represented by the smallest equivalent orifice of only 6·604 square feet of area, the air current was 17,928 cubic feet per minute, with an observed water-gauge of 1·060 in., instead of the theoretical vacuum of 1·059 in. Against the lowest mine resistance, corresponding with the largest equivalent orifice of 20·922 square feet area, the air current was 50·357 cubic feet per minute, with an observed water-guage of 0·832 in., instead of the theoretical vacuum of 0·834 in. The greatest difference between the observed and the calculated water-guage in the five experiments did not exceed 0·002. At Lalle the greatest difference between the observed and calculated results was 0·014 in., and at Bessèges 0·124 in. The circumferential speed was 3936 ft. per minute in each case. As the mine resistance scarcely ever exceeds that

represented by so small an equivalent inlet orifice of only four square feet, while in large mines, even in England, it rarely falls below what corresponds with the largest inlet here tried of nearly 30 ft. square, these results clearly confirm the author's theory within the limits prevailing in practice.

Theory and practice concur, the author considers, in pointing to the Guibal centrifugal fan as the best exhausting ventilator. Its approximate manometric efficiency has been found to average 65 per cent. of perfection. Assuming this coefficient, from the effective vacuum desired is then deduced the proper speed for the tips of the fan blades, which constitutes the main datum for the construction of an exhausting ventilator. Whether this speed shall be obtained by a small quick fan, or by a larger and slower, is left free to be decided by considerations of room, cost, and mechanical simplicity; only guarding against any risk of the fan presenting too small an area of passage through itself for the current necessary in a large mine. As to the number of the fan blades the author believes there is every advantage in having them numerous, because the air is thereby better guided, while the strain on the blades and their tremor are less: the only limitation is that their aggregate thickness should not be so considerable as to throttle the passage of the air-current through the fan. For the power necessary to drive the fan, it will be safe enough simply to reckon this at double the useful work required to be performed in the ventilation of any mine, since the useful effect of the Guibal fan has been found to average about 50 per cent.

UTILISATION OF UNMARKETABLE ZINC ORES AND BARYTES.

Some years since Mr. J. B. Orr introduced a process for the production of a white pigment by treating solutions of sulphide of barium with solutions of zinc salts principally, the sulphate to obtain mixed precipitates of sulphate of baryta and sulphide of zinc, but it was found that the production of pigments by this method has certain attendant disadvantages. Hitherto the zinc solutions used have been obtained from spelter, scrap, or other form of zinc in a metallic state, but Mr. Orr has now succeeded in producing a better pigment at a lower price. He takes poor zinciferous ores containing blende or calamine in combination with other metals, but too poor for existing in a condition which unfits them for ordinary metallurgical treatment. Common bluestone ore containing from 25 to 30 per cent. of zinc may advantageously be used for the purpose. These ores he pulverises to fineness and roasts upon the bed of an ordinary calciner until "sweet." The resulting mass is lixiviated with water to extract all the zinc existing as sulphate, and thereafter the insoluble portion is treated with dilute sulphuric acid to exhaust the remaining zinc. Any copper existing in the ore is also extracted at the same time. These solutions are mixed together, and the copper is extracted in any well known way; the solutions are also purified from iron and other impurities by any of the usual methods.

After the zinc, copper, &c., have been extracted from the ore as described, the ores are left in such a state that the lead and other remaining metals can be obtained by smelting the ore down. He next reduces sulphate of strontium to the state of sulphide in the usual manner adopted for the reduction of baryta and lixiviate the mass. The lixiviated strontic salt is mixed with the purified zinc sulphate, so as to give intimately mixed precipitates of strontic sulphate and zincic sulphide, corresponding to the equation $Sr\,S + Zn\,SO_4 = Zn\,S + Sr\,SO_4$. Various strengths of these liquors may be used, but he prefers to work the strontic salt at about 1·060 sp. gr. and the zinc at about 1·150 sq. gr.

The precipitates are now collected, dried, calcined at a red heat until all sulphurous vapours have disappeared, cooled, and washed, and again dried, when they are in the form of a beautifully white powder equal to white lead in body and unaffected by sulphurous or other gases. Strontium being absolutely non-poisonous frees it from an objection urged against the baryta salts, and being of a density much more nearly approaching that of the zinc with which it is combined renders the pigment more homogeneous in character, and consequently more enduring as a paint. Practically it is difficult to obtain the strontic salts in a pure state. Celestine as found has ordinarily combined with it from 5 to 10 per cent. of the isomorphous barytic salt, but Mr. Orr finds that this small percentage of barytic salt does not materially affect the result. Other proportions of the salts than those before mentioned may be used, and he sometimes employs the chloride or the nitrate of zinc before adding sulphate of zinc, but these are more expensive than the sulphate which he prefers, the result always being mixed precipitates of zinc sulphide and strontium sulphate. He also occasionally substitutes hydrochloric acid for sulphuric in the treatment of the zinciferous ore and obtains solutions of zincic and cupric chlorides therefrom, which are purified and treated in a similar manner as described for the sulphates. The pigment made by this process is equally suitable for tempora as for oil painting, and is as easily worked as white wash in the one case or white lead in the other.

Another process applicable to the treatment of bluestone and other ores in which the sulphides of lead and zinc are combined, with or without other metals, such as copper and silver, has recently been patented by Mr. J. C. Stevenson, M.P., and J. G. Tatters, of Westoe. After the ore has been ground and calcined in order to drive off its sulphur it is treated and agitated with weak hydrochloric acid without boiling, and in quantity equivalent as nearly as possible to dissolve the zinc without dissolving the other metals. From this solution oxide of zinc may be precipitated by lime, or the zinc may be obtained in other combinations by other suitable known means. The residue after the separation of the zinc may be used for the production of lead and silver by ordinary metallurgic processes. This residue may also be treated with hydrochloric acid with the aid of heat, so as to convert the lead and other metals into chlorides. The mixture of chlorides and gangue is boiled down, dried, and calcined in a furnace at a heat sufficient to drive off the excess of acid, and render insoluble the iron present. The calcined mass is treated with cold water to remove chloride of zinc, which may have been formed from any zinc which had resisted the treatment with weak acid. Such chloride of zinc is added to the bulk previously produced, Chloride of lead from iron may be then separated from the mass or gangue by water or solutions of alkaline, or earthy chlorides, or by other known means. The chlorides of copper and silver in solution may be treated by any known means for the separation of these metals.

INSPECTION OF EXPLOSIVES.—The report of Lieut.-Colonel V. D. Majendie, C.B., Chief Inspector of Explosives, upon the explosion at Brock's factory, South Norwood, has just been issued. The cause of the accident appears to have been culpable neglect of the regulations for securing safety. The report remarks that the accident is valuable as testifying to the very real and practical danger of disregarding a precaution which finds a prominent place among the regulations imposed by or in virtue of the Explosives Act, 1875—the use in danger buildings of suitable magazine boots, made without any iron, and free from contract with grit. It is not often the value of a precaution of this sort is established in so direct a manner, and as the result of actual personal observation, and it is this consideration which gives to this accident an importance above that which intrinsically belongs to it. It is added that Messrs. C. T. Brock and Co. have evidently not adopted such a system of supervision as will ensure the invariable observance of the important regulation as to the use of magazine boots in danger buildings, and omission on their part which is the less defensible, seeing that their attention has on previous occasions been specially directed to this point. It transpires that the abolition of pockets in the clothing of the workpeople is not strictly or vigorously enforced, for both Hill and Westcombe proved on the Inspector's examining to have pockets in their clothing only partially sewn up.

SMELTING ZINC.—According to the invention of Messrs. BINON and GRANDFILS, of Membach, Belgium, the zinc ore and the coal or other carbonaceous matter required for its reduction is mixed with sufficient lime, cement, clay, or other cheap binding material to make the mixture cohere, or in cases when the ore or carbonaceous reducing agent is itself of a binding nature they may dispense with additional binding material. They press or mould the mixture into bricks or blocks, which may be of any convenient size or shape, and may be hollow or perforated; preferably they adopt such size and shape for the bricks or blocks as will render them suitable for charging without loss of space the retort or muffle, in which the reduction is effected by heat in the usual way. By this mode of operating they facilitate the feeding of the retorts or muffles, and more completely utilise their capacity, and by effecting close contact of the air with the reducing agent they obtain more complete reduction.

SALE OF SHARES BY AUCTION.—At the Stock and Share Auction Company's sale on Tuesday the following were amongst the prices obtained:—West Pateley Bridge Lead Mines, 1*l.* fully paid, 10s.; Pioneer Mining Company, 1*l.* fully paid, 19s.; Great Southern Mysore Gold Mining 1*l.* shares, 15s. paid, 10s.; Southwark and Deptford Tramways, 10*l.* fully paid, 9*l.*; Ystwith Lead Mining Company, 1*l.* fully paid, 7s. 6d.; London and Westminster Supply Association, 5*l.* Prefs., 20s.; West Craven Moor Lead, 10*l.* fully paid, 20s.; Hornachos Silver Lead Mining, 10*l.* fully paid, 7*l.* 10s.; South Wheal Crebor, 1*l.* fully paid, 10s.

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D. E. CHANDLER, Esq., 45, Finsbury Pavement, E.C.

BROKERS—Messrs. PERCY, BROWNING, AND TODD, Crown-court, Threadneedle-street, London.

AUDITORS—Messrs. FREDERICK B. SMART AND CO., Chartered Accountants, 53, Cannon-street, E.C.

SECRETARY—R. N. COLLIER, Esq.

OFFICES.

115, CANNON STREET, LONDON.
34, AVENUE DE L'OPERA, PARIS.

ABRIDGED PROSPECTUS.

The company is formed to provide for its members at reduced rates, and also for the general public, improved accommodation for marine excursions, and from its own collieries, coal for domestic purposes, in addition to which, and as a source of considerable profit, the company will undertake and carry on at home and abroad salvage operations. A most advantageous provisional contract has been entered into, whereby the company's objects may be immediately attained.

The shareholders will be entitled, as specifically set out hereinafter to a return in coal or excursions equal to the whole sum invested, yet retain all their interest as shareholders, the dividends being estimated to be very considerable indeed.

All the businesses will be taken over as a going concern, together with the efficient staff, as and from the 1st of October, 1881, being all now in work.

THE NATIONAL EXCURSION STEAMSHIP, COLLIERY, AND SALVAGE COMPANY (LIMITED).

THE EXCURSION DEPARTMENT.—The purchase includes a steamship of most elegant design and comfortable appointments for passenger traffic. She is capable of carrying 600 persons, and is 238 tons burden, 175 ft. long and 21 ft. wide, with first and second class cabins for ladies and gentlemen, captain's and steward's cabins, saloons, &c. She was built in 1872 for Her Majesty's Government, all of the best materials, mahogany, oak, and teak being principally used; she is heavily coppered and copper fastened throughout, her hull being remarkably strong; and is classed A1 at Lloyd's.

It is proposed to run this vessel, with three others, during the summer season between London and Margate, also between London or Blackwall and Boulogne about three or four times a week, with occasional trips along the coast to Brighton, &c. In the winters the steamers may be utilised in voyages in milder latitudes, for which, it is believed, there will be profitable employment.

THE NATIONAL EXCURSION STEAMSHIP, COLLIERY, AND SALVAGE COMPANY (LIMITED).

THE COLLIERY PROPERTIES COMPRISE:—No. 1. Those extensive collieries in the Forest of Dean, known for many years as the Parkend and New Fancy Collieries—including also the Independent Level, Standfast Royal, and Catch Can—and which have been already successfully worked and developed.

They comprise about 1150 acres, estimated to contain the large quantity of twelve million tons of coal, mostly being of the very best quality for household and domestic purposes.

The property is held from the Crown under the well-known Forest of Dean Tenure, and which, except as to certain small leasehold parts, is a fee simple (for ever) or other like descendable estate, subject to exceptionally low rents and royalties, the total dead rent being only £380 per annum, merging into royalties, the maximum being only 3d. per ton.

These collieries are in working order, and supplied with machinery and working gear of the most costly and superior description, equal to raising over 700 tons per day, the amount expended in their development, so as to put them in their present productive condition, being considerably more than £50,000, whereby they have produced over 100,000 tons per annum, but by a further outlay of about £3000 this output can be nearly doubled if necessary.

No. 2.—THE PRINCESS ROYAL COLLIERY.—It is situate adjacent to the Parkend and New Fancy Collieries, and comprises about 60 acres, containing about 200,000 tons of excellent coal of a superior character.

This colliery likewise is in thorough working order, is now in work, and is furnished with all necessary machinery, offices, railway siding, workshops, &c., requisite for carrying on the works.

It is held for 20 years at a dead rent of £300 a year, merging into royalties of from 6d. to 10d. per ton on coal raised; but the freehold can be purchased on advantageous terms, and an optional contract has been entered into.

Before consenting to join the board, the Chairman, Henry Johnson McCulloch, Esq., Inspector of Collieries to the Admiralty, also a mining and civil engineer of thirty-five years' large experience, and member of the Mining Institution of Great Britain and Belgium, made it a *sine qua non* that he should have a special report upon the collieries made on behalf of the directors, which report can be seen at the offices of the solicitor to the company.

THE NATIONAL EXCURSION STEAMSHIP COLLIERY AND SALVAGE COMPANY (LIMITED).

THE SALVAGE DEPARTMENT.—The contracts comprise for this branch the entire stock, plant, and appointments for carrying on this important business, and which is calculated to produce very large profits for the company, the plant being altogether the most expensive and complete of any in this country, or perhaps elsewhere.

Many ships and cargoes lost during the last twelve months are now awaiting the salvage operations of the company—in fact, the amount of business is practically unlimited, and the profit attending the use of really effective appliances is beyond ordinary expectation. The salvage of cargo alone should afford most abundant and profitable employment.

From the operations during the last few months, when the salvage business had an opportunity of fair trial, and from the profits then realised day by day, it may be safely calculated that from the salvage department alone with even very moderate success very large dividends must accrue to the company.

In addition to the usual report and valuation by a surveyor of repute, the ships and salvage plant have also been inspected by a committee of the board.

SPECIAL ADVANTAGES TO SHAREHOLDERS.—Every shareholder in the company will be entitled, for every share he holds, to two first-class return tickets for a passage between London or Blackwall, and Boulogne, at 5s. each, being a reduction of 10s. each below the usual charges, which vary from 13s. to 18s. 6d., or an average of 15s.; or, in lieu thereof, at his option will be entitled to five first-class return tickets between London or Blackwall and Margate, at 2s. each, being a reduction of 4s. each on the usual prices, and in either case realising practically a gain or bonus equal to a return of the entire amount of his investment; or, in lieu thereof, he will be in like manner entitled to 4 tons of the best coal from the company's collieries, delivered carriage free within three miles of any of the company's depôt in London or suburbs, at a reduction of 5s. per ton below the current price of the day for best coal charged by such of the leading merchants as shall be adopted as a standard by the board of directors from time to time. Shareholders requiring delivery near London, at a greater distance, will be charged the additional carriage, while for other localities in England nearer to or further from the colliery the price will be fixed at 7s. per ton at the pit's mouth for 5 tons for each share, with the addition of the actual cost of carriage and delivery only. This rule will apply to Bristol, Gloucestershire, &c., while at Boulogne, Paris, and all other parts of France, wherever the company may have depots, the reduction will be on four tons per share 6 frs. below the current market price per ton for the best coals in such localities, and will be determined by the directors from time to time, the object and effect being that in most cases the shareholder can thereby obtain what to him will be practically a speedy return of his entire investment, yet still remain a shareholder in the company. After the return of capital by the foregoing arrangements shareholders will, nevertheless, be entitled to coals, excursions, &c., at rates below those to the general public.

These various rates for excursions and coals are fixed upon data that nevertheless will leave a sufficient margin of profit to yield satisfactory dividends to the investors.

The special principle and medium whereby the foregoing advantages to shareholders are possible, arise from the simple fact of the customers being largely provided by the shareholders themselves, thereby avoiding loss from want of custom, and heavy commissions to middlemen, and other expenses incidental to obtaining business.

The purchase price has been fixed by the vendor, who is the promoter of the company, at £110,000, payable in cash, but with the option to the directors to pay any portion of it not exceeding £40,000 in shares, should they consider it more advantageous to the company, and with such modifications in the terms of purchase as the directors and vendor shall agree upon prior to allotment, provided, however, that in no case shall the price exceed said sum of £110,000.

COLLIERIES.—A well known mining engineer has inspected the property so lately as the 24th ultimo confirms the report of another engineer of large experience (which reports can be seen at the office of the solicitor to the Company), and states that in two months the collieries can vend 400 tons per diem, and that within 12 months the output will be 3500 to 4000 tons per week, and with additional mechanical means the price of getting the coal can be reduced, and a profit of 2s per ton be realised, which on 200,000 tons would give £20,000 per annum. An increase of only 6d. per ton additional rise on the present low prices would yield a further profit of £5000 per annum.

From estimates it is manifest that minimum dividends of over 16 per cent. may be anticipated without the probable large income from the salvage operations, or increase in the price of coal.

No promotion money will be paid, and the expenses will be limited to the actual outlay.

Prospectuses may be had of the bankers and brokers, and at the company's offices. Samples of the coal can also be seen at the company's offices.

It is intended to apply to the Committee of the London Stock Exchange for a settlement and official quotation.

In the High Court of Justice—Chancery Division.
MR. JUSTICE CHITTY.

IN THE MATTER OF THE COMPANIES ACTS, 1862 AND 1867; AND IN THE MATTER OF THE MORAY FIRTH MINING COMPANY (LIMITED).

IMPORTANT NOTICE TO OWNERS OF MINING PROPERTY, CAPITALISTS, SPECULATORS, AND OTHERS.

TO BE SOLD, BY TENDER, the VALUABLE LEASE and MINING RIGHTS, extending over an area of 150 acres, or thereabouts, in the parish of Drainie, on the shores of the Moray Firth, and close to Lossiemouth, in the county of Elgin, N.B., held direct from the Lord of the Manor at a nominal dead rent, merging into a very light royalty for a term of 21 years, together with the extensive and newly-erected BUILDINGS, and the

VALUABLE PLANT, MACHINERY, AND STORES

Therein contained, all of which were new within the past 18 months, and include complete PUMPING, WINDING, CRUSHING, and DRESSING MACHINEY, besides a large quantity of STORES and LOOSE MATERIALS of first-rate quality.

Orders to view the property and detailed particulars of the Buildings, Plant, Machinery, and Stores thereon and therein, and a Form of Tender, together with particulars and conditions of sale, may be obtained from the following Solicitors:—

Messrs. GREENFIELD and ABBOTT, 37, Queen Victoria-street, E.C., London; Messrs. G. and P. GATHERER, 30, North-street, Elgin, N.B.; and Messrs. CAMERON and ALLAN, Bank of Scotland, Elgin, N.B.; also from the Official Liquidator, JOHN H. TILLY, Esq., F.C.A., 37, Queen Victoria-street, E.C., London.

All Tenders must be sent in—marked, "Tender Moray Firth Mining Company (Limited)"—on or before the 31st day of October, 1881, and addressed—JOHN W. HAWKINS, Esq., Chief Clerk, Mr. Justice Chitty's Chambers, Rolls Yard, Chancery-lane E.C., London.

The Court does not bind itself to accept the highest or any Tender.

IN LIQUIDATION.

THE NEVIN SYENITE GRANITE COMPANY (LIMITED).
COUNTY OF CARNARVON.

IMPORTANT TO CAPITALISTS, SETT QUARRY PROPRIETORS, AND OTHERS.

MESSRS. WILLIAM DEW AND SON WILL SELL, BY PUBLIC AUCTION, at the Royal Hotel, Carnarvon, on Saturday, the 1st day of October, 1881, at Two o'clock in the afternoon, subject to conditions and in such Lots as may be determined upon at the time of sale.

The above valuable SETT QUARRY is most conveniently situated on Moel-Ty-Gwyn Mountain, in the parish of Pistyll, close to Nevin, on the Carnarvon Bay, on the side of a sloping hill, with ample facilities for depositing waste, connected by an incline with the sea wharf, where there is sufficient depth of water for loading at all times of the tide. The accommodation is known to be far superior to any other on the coast.

The general character of the granite rock, which is unlimited in quantity, is of most excellent quality, and it is admitted by practical engineers that no better stone for paving purposes is brought into the market; the demand is also very considerable and annually increasing.

The works stand on an area of 83A. 2R. 5P., and are held under two separate leases from the "Vaynol" and "Nanhoron" Estates, the former dated the 18th July, 1878, for a term of 21 years, at an annual dead rent of 50*l.* per annum, merging into a royalty of 3d. per ton for setts, and 2d. per ton for metalling; and the latter dated 1st August, 1878, for a term of 40 years, at an annual dead rent for the first 20 years or £20, and £45 per annum for the remaining term, and merging into a royalty of 2½d. per ton. There is also a wayleave rent of 1d. per ton for stone carried over the tramway, leading from a portion of the property.

The tramways and inclines with drums connecting the quarry with the wharf are in perfect order; there are also two stone-built offices, two weighing machine houses, and coal yard.

Also, 14 new stone-built workmen's cottages and corner shops, with the offices, coach-house, stabling, and about 4 acres of land. Each of the cottages contain four excellent bedrooms, two kitchens, Parlour, with roomy yard and garden.

The loose machinery and plant comprise a new eight horse-power portable steam-engine by Rutson and Co., Lincoln, powerful stone crusher by Robert Broadbent, Stalybridge, wooden and iron wagons, crab winches, screw jack, double and treble sheave blocks, two patent weighbridges, smith's tools, stocks and dies, grindstones, weighing beam, and triangle mooring chain and anchors.

N.B.—The purchaser of the quarry will have the option of taking the whole of the loose plant and machinery at a valuation in the usual way.

For further particulars apply to the liquidator, Mr. TINGLE, 110, Cannon-street, London, E.C.; Messrs. OLIVER and SONS, Union Bank Chambers, 61, Carey-street, Lincolns Inn, London, Solicitors; Messrs. PLEWS, IRVINE, and HODGES, 79, Mark-lane, London, E.C., Solicitors; Messrs. JAMES and BAZALGETTE, Bangor, Solicitors; and the AUCTIONEERS, Wellfield House, Bangor, and Town Hall, Rhyl.

TO BE SOLD, BY PRIVATE TENDER, pursuant to an Order of the High Court of Justice, Chancery Division, made in an Action of JAY V. THE BAGWORTH COLLIERY COMPANY (Limited), with the approbation of the Master of the Rolls, the Judge to whose Court the said Action is attached, the LEASEHOLD MINING PROPERTY, known as

THE BAGWORTH COLLIERY,

Adjoining the Bagworth Station, on the Leicester and Burton Line of Railway, comprising TWO HUNDRED AND NINE ACRES, or thereabouts, of UNGOT COAL, with the MANAGERS' RESIDENCE, COTTAGES, ENGINE-HOUSE OFFICES, MACHINERY, and RAILS and TRAMWAY necessary for successfully carrying on the colliery, HORSES, and FIXED and LOOSE PLANT.

Tenders are to be sent to JOHN W. HAWKINS, Esq., Chief Clerk, at the Chambers, situate in the Rolls-yard, Chancery-lane, London, not later than the 26th September, 1881.

Particulars and conditions of sale, with Plan annexed, and Forms of Tender, may be had gratis in London of Messrs. DRAKE, SON, and PARTON, 24, Rood-lane, Fenchurch-street, Solicitors; Messrs. PEACE and WALLER, 11, Grocers' Hall-court, Poultry, Solicitors; and Mr. JAMES COOPER, 3, Coleman-street Buildings, Public Accountant; and of Mr. GEORGE TEMPEST WADE, Auctioneer, Horsefair-street, Leicester. JOHN W. HAWKINS, Chief Clerk.

Dated this 7th day of September, 1881.

SWANSEA

EXTENSIVE MANUFACTURING PREMISES (the walls built substantially of stone), covering nearly an ACRE OF GROUND, directly abutting on the Tennant Canal and Vale of Neath Railway, and in close proximity to the New East Dock, now in course of construction at Port Tennant (with or without about three acres of tipping ground),

FOR SALE, BY PRIVATE CONTRACT.

The premises covered in give the following dimensions in square feet:—

Ground Floor	21,842
First Floor	8,872
Second Floor	4,867
Square feet of flooring	35,581 (roofed over).

Admirably adapted for Engineering, Tin-plate, Fuel, Galvanising, Paint, Oil, or Chemical Works, Brewery, Maltings, Steam Cooperage, Builders' Shops, Steam Saw Mills, or, in fact, any trade requiring extensive, substantial premises in a splendid position as regards business facilities, the reception of the raw material, and the transit of goods.

Apply to—

ELFORD, WILLIAMS, AND CO., SWANSEA.

FOR SALE, a 30 H.P. PORTABLE STEAM ENGINE; with link-motion reversing gear, has drum and gearing complete for winding and pumping.

A 14 H.P. PORTABLE WINDING and PUMPING ENGINE.
Also a 6 H.P. PORTABLE HOISTING ENGINE.
Apply to—

BARROWS AND STEWART, ENGINEERS, BANBURY.

POSTPONEMENT OF INTENDED SALE BY AUCTION.

THE INTENDED SALE, BY AUCTION, of GARESFIELD and ESTATE, comprising 1900 acres, more or less, of FREEHOLD COAL; 500 acres, more or less, of FREEHOLD FIRE-CLAY; 50 acres, more or less, of LEASEHOLD COAL; 570 acres, more or less, of LEASEHOLD FIRE-CLAY; and 530 acres, more or less, of LAND; and the MINES OF COAL under the estate of Ravenside, containing 295 acres, more or less, all situate in the parish of Ryton in the county of Durham,

IS TEMPORALLY POSTPONED.

A time for the sale will be stated in future advertisements, unless the properties are previously sold by private contract.

Offers to buy by private contract may be sent to, and copies of the particulars and conditions of sale may be obtained from Messrs. CLAYTON and GIBSON, Solicitors, Guildhall, Newcastle-upon-Tyne.

VALUABLE MINES OF SILVER-LEAD, BLENDE, AND COPPER IN GERMANY.

In offering the ABOVE WELL-KNOWN MINES FOR SALE, the Proprietors beg to state that the Mines have been worked for years with the greatest success, and they consider this offer a first-rate opportunity to secure a genuine and most profitable investment.

The mines, at present worked by 230 miners, although double the number might be occupied, have never yet been offered to the public before.

Address, "W. O.," at C. H. May and Co.'s General Advertising Offices, 78, Gracechurch-street, London.

FOR SALE OR HIRE, ONE HUNDRED to TWO HUNDRED or MORE 3½ and 4-yard END TIP WAGONS; also several 8 in. and 13 in. cylinder TANK LOCOMOTIVES, and other CONTRACTOR'S PLANT, equal to new.

Apply, JOHN DICKSON, Jun., or A. C. BETTS, New North Works, Bootle, near Liverpool.

SLATE QUARRIES.

THE ABOVE are situated in the middle of the best SLATE DISTRCTS in NORTH WALES, and will be DISPOSED OF ON REASONABLE TERMS. Principals only treated with.

Apply, by letter only, to "W. X.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

COUNTY OF DURHAM.

WEARDALE LEAD MINES.

TO BE SUBLET, for a term of years, the LEAD MINES under a considerable tract in the eastern portion of the parish of STANHOPE and in the parish of WOLSINGHAM, belonging to the Ecclesiastical Commissioners for England, held by W. B. Beaumont, Esq., M.P.

Apply to Messrs. DEES and THOMPSON, Solicitors, Newcastle-upon-Tyne.

FOR SALE, ONE of the BEST SETT QUARRIES in NORTH WALES, situated on the water's edge. No expense for tramways to ship; setts when made can load direct into vessel. Present owner giving up that portion of his business, will be sold a great bargain to immediate purchaser.

Apply to Messrs. YATES, SON, and STANANOUGHT, 10, Water-street, Liverpool.

CAPITALISTS ONLY,

ONE OF THE MOST IMPORTANT PATENTS EXTANT IS OPEN FOR SALE, or for WORKING CAPITAL. Its value is beyond description

Address, first by letter, "C. E.," W. Tooth, Esq., No. 12, Laurence Pountney-lane, City.

FLUOR SPAR FOR SALE, splendid qualities, from ONE to FIVE HUNDRED TONS.

Prices and samples on application to GEO. G. BLACKWELL, Mineral Broker, 26, Chapel-street, Liverpool.

FLUOR SPAR FOR SALE, splendid qualities, from ONE HUNDRED to FIVE HUNDRED TONS.

Price and samples on application to the Secretary, Tamar Silver-Lead and Fluor-Spar Mining Company (Limited), 85, Gracechurch-street, London, E.C.

ON SALE,—SPLENDID NEW PAIR of 20-in. WINDING ENGINES; 25-horse ROBEY MINING ENGINE, with winding gear, worked two months; 20-horse PORTABLE ENGINE, with winding gear, worked twelve months. TO BE SOLD A BARGAIN.

Address, T. JOHNSON, 72, Dicconson-street, Wigan.

GLASGOW AND THE HIGHLANDS.

ROYAL ROUTE VIA CRINAN AND CALEDONIAN CANALS by Royal Mail Steamer, COLUMBA or IONA, from GLASGOW daily at 7 A.M., and from GREENOCK at 9 A.M., conveying PASSENGERS for OBAN, NORTH and WEST HIGHLANDS.

Official Guide Book, 2d.; Illustrated Copies, 6d. and 1s., by post, or at Euston, St. Pancras, King's Cross Railway Bookstalls, London.

Bill, with Map and Tourist Fares, free by post, from the Owner, Mr. DAVID MACBRAYNE, 119, Hope-street, Glasgow.

TO INVESTORS SEEKING SOUND, CHEAP, GENUINE, AND PROGRESSIVE INVESTMENTS.

MESSRS. THOMPSON AND SON, PLYMOUTH, after 30 years practical experience, do not hesitate to recommend the UNDERMENTIONED MINE SHARES for IMMEDIATE PURCHASE, well knowing they will ere long rank amongst the richest mines Cornwall has ever produced, and at present prices the cheapest in the market. The capital in each, although sufficient, is very small, not one-quarter of the promotion money charged by some vendors of abandoned and impossible mines. The various considerations offered to shareholders in the following mines, as compared with those of the generality of the latest announced ventures, are deserving of the careful judgment of mining shareholders. The fullest particulars will be given, and questions answered. The mines referred to are—

THE OLD WHEAL ROSE SILVER-LEAD AND SPATHOSE IRON MINE.

This mine is in the parish of Sithney in the Mounts Bay. It is not near nor has anything akin to East Wheal Rose in Newlyn. This mine has only been worked 58 fms. deep, returning over £100,000 worth of lead, containing 60 ozs. to silver to the ton. This little depth for a lead mine in Cornwall is only where West Chiverton, East Wheal Rose, and other rich mines commenced to make; therefore, it is nearly maiden ground. The fullest particulars may be seen in Messrs. Thompson's pamphlet on Sound and Rising Mines. Sent post free. These shares are at present only 20s. each, fully-paid.

NEW PENROSE TIN AND COPPER MINE COMPANY (LIMITED).

This mine is in the parish of Breage in the Mounts Bay, and was extensively worked under the sea from the cliff, but never inland. Over £100,000 profit was made from the workings, but the sea broke in and the mine stopped; an immense area of mineral (maiden) ground is now being explored and worked inland, and the same lode which made such riches under the sea is now being sunk on. Any week a great discovery may be made. These shares are only at par at 20s. each, fully-paid. Shareholders should apply for particulars. Capt. Charles Thomas, the late manager of Dolcoath, pronounced the mine a worthy undertaking.

THE ROYALTON TIN MINE COMPANY (LIMITED).

This mine is in the parish of St. Columb, the property of the Prince of Wales as Duke of Cornwall; it is only 25 fms. deep, and has been worked as an open-cutting, where the tin stone was so very prolific that £20,000 were realised with very slight machinery. No mine offers a better prospect of early success than this, as there are thousands of tons of tin stone now in sight. These shares are at par, or 20s. fully-paid, but will very soon go to a premium.

Messrs. THOMPSON and SON cannot guarantee to deliver any large quantity of these shares at par, as any day they may be dealt in at enhanced prices. Messrs. THOMPSON invite a perusal of their circular, which contains particulars of other mines.

Plymouth, September 8th, 1881.

NEW AND REVISED EDITION OF MITCHELL'S PRACTICAL ASSAYING.

In One Vol., 8vo., with 188 Woodcuts, price 31s. 6d.

A MANUAL OF PRACTICAL ASSAYING.

By JOHN MITCHELL, F.C.S.

The FIFTH EDITION, revised and re-edited by WILLIAM CROOKES, F.R.S., with Improvements and Additions rendered necessary by the Progress of Chemical Science.

London: LONGMANS and Co.

Now ready.

FRANCIS'S MAP OF THE LODES AND MINES IN CARDIGANSHIRE AND MONTGOMERYSHIRE

Shows all the Lodes and Positions of Mines in the two Counties, and no Shareholder should be without it, as it will be found invaluable to Investors.

Price, post free, 3s., from Capt. FRANCIS, Goginan, Aberystwith; or from Messrs. POULTER, GRAY, and Co., 31, Threadneedle-street, London, E.C.

LEGITIMATE AND ADVANCING MINES.—A LIST of the MOST SECURE MINES, with their present and future prospects, selected for profitable investment, with remarks on the present mode of forming Mining Companies to the injury of fair mining enterprise, is being published by Messrs. THOMPSON and SON, Plymouth, and will be forwarded post free on application.

THE MINING SHARE LIST.

BRITISH DIVIDEND MINES.

Shares	Company	Paid	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.
3939	Blue Hills *t*, *c*, St. Agnes	4 6 6	3	2½ 3	0 4 0	0 2 0	May 1881
1000	Caron *l*, Cardigan*	2 0 0	½	⅜ ½	0 4 0	0 2 0	Oct. 1878
6000	Carn Brea, *c*, *t*, Illogan†	9 7 11	25¾	27 28	52 1 8	0 10 0	Aug. 1881
10240	Devon Gt. Consols, *c*, *a*, Tavistock*†	1 0 0	8	7½ 8	118 7 0	0 6 0	Dec. 1880
4296	Dolcoath, *c*, *t*, Camborne	10 14 10	78½	85 87½	123 3 9	1 12 6	Aug. 1881
6400	East Pool, *t*, *c*, Illogan	0 9 9	38½	38¼ 38¾	24 17 9	1 0 0	Aug. 1881
12500	Frongoch,* *l*, Cardgn (11000 sh.iss.	2 0 0	4	3½ 4	0 4 0	0 2 0	Jan. 1881
40000	Glasg. Car., *c** [30000sh. £1 pd., 10000 15s. pd.]		1	⅝ ⅞	0 13 10	0 0 6	Aug 1878
8500	Gorsedd and Merllyn Con., *l*, Flint.	2 10 0	3	2½ 3	0 5 0	0 5 0	Aug. 1877
15000	Great Laxey, *l*, Isle of Man*†	4 0 0	18	17 18	27 6 0	0 6 0	July 1881
6400	Green Hurth, *l*, Durham*	0 6 0	7½	7 7½	2 18 0	0 2 0	Dec. 1880
000	Grogwinion, *l*, Cardigan*	2 0 0	3	2 3	0 16 4	0 1 6	July 1880
10240	Gunnislake (Clitters), *t*, *c*‡	2 2 0	3¼	2¼ 3	0 15 9	0 1 0	Mar. 1881
2800	Isle of Man, *l*, Isle of Man*	25 0 0	—		83 5 0	1 0 0	Sept. 1880
2000	Leadhills,* *l*, Lanarkshire	6 0 0	2¾	1¼ 2	0 15 0	0 3 0	Mar. 1878
400	Lisburne,* *l*, Cardiganshire	13 15 0	—		609 10 0	1 0 0	June 1881
10000	Mellanear, *c*, Hayle*	2 0 0	4½	4 4½	1 8 0	0 2 0	July 1881
9000	Minera Mining Co., *l*, Wrexham*	5 0 0	9	8 9	69 0 8	0 1 6	Feb. 1881
20000	Mining Co. of Ireland, *cl*, *c*, *l**	7 0 0	2¼	2 2¼	24 0 0	0 2 6	Jan. 1880
8000	Mona,* *c*, Anglesea	5 0 0	10½	10 11	0 10 0	0 10 0	July 1880
11829	North Hendre, *l*, Wales	2 10 0	6	5¾ 6	3 12 6	0 2 6	May 1881
8146	Ditto	1 5 0	3½	3 3½	0 8 6	0 1 3	May 1881
2000	North Levant, *t*, *c*, St. Just‡	13 6 0	4	3 4	4 16 0	0 3 0	Feb. 1881
5000	Penhalls, *t*, St. Agnes‡	3 17 6	1½	1½ 1¾	3 17 0	0 1 6	Jan. 1881
6000	Pennant, *l*, *bar*, North Wales*	5 0 0	5	4 5	0 10 0	0 5 0	Mar. 1878
12000	Phœnix United, *t*, *c*, Link §	6 0 3	3¼	3½ 4	17 0 0	0 2 6	Mar. 1880
18000	Pr. Patrick,* *s-l*, (als.12000pf.10 p.c)	1 0 0	—		0 18 6	0 2 0	July 1880
10000	Red Rock,* *l*, Cardigan	2 0 0	2	1 2	0 4 0	0 2 0	Jan. 1878
12000	Roman Gravels, *l*, Salop*	7 10 0	11½	10¾ 11¼	8 11 0	0 5 0	June 1881
4000	Rhydalun,* *l*, Wales	10 0 0	—		0 5 0	0 5 0	Feb. 1880
512	South Caradon, *c*, St. Cleer†	1 5 0	42½	37½ 42½	749 0 0	1 0 0	July 1880
6123	South Condurrow, *t*, *c*, Camborne†	6 5 6	10	9¼ 9¾	8 7 0	0 5 0	Apr. 1881
9000	South Darren, *l*, Cardigan*	1 10 0	1¾	1⅜ 1⅝	0 4 0	0 2 0	Apr. 1880
4500	South Wheal Frances, *t*, Illogan†	7 12 4	14½	14 14½	40 15 6	0 10 0	July 1880
110000	Tankerville Gt. Consols, *l*, Salop*†	0 10 0	⅝	⅜ ½	0 16 3	0 0 10	Jan. 1877
6000	Tincroft, *c*, *t*, Pool, Illogan†§	11 10 0	19	18¼ 19¼	50 18 6	0 5 0	Aug. 1881
15000	Van, *l*, Llanidloes*	4 5 0	9	8 9	25 5 6	0 2 6	July 1881
3000	West Chiverton, *l*, Perranzabuloe†§	21 2 6	1¼	1 1¼	55 10 0	0 10 0	Feb. 1878
512	West Tolgus, *c*, Redruth	95 10 0	18¾	18¼ 18¾	33 0 0	1 0 0	Jan. 1879
1200	West Wheal Seton, *c*, Camborne†§	28 0 0	19	16 18	223 0 0	0 7 6	Apr. 1878
6000	West Basset, *c*, Illogan†	7 0 4	14½	14 14½	27 12 0	0 5 0	July 1881
12000	Wheal Crebor, *c*, Tavistock	2 4 0	4	3½ 4	0 12 9	0 2 6	July 1881
1024	Wheal Eliza Consols, *t*, St. Austell	18 0 0	—		42 10 0	8 0 0	Aug. 1880
6000	Wheal Grenville, *t*, Camborne	15 0 0	9¾	10½ 11	0 7 6	0 2 6	Jan. 1881
4295	Wheal Kitty, *t*, St. Agnes	5 4 6	2	1¾ 2	12 18 6	0 1 6	Jan. 1881
3000	Wheal Peevor, *t*, Redruth	7 11 0	14½	13¾ 14	8 4 6	0 6 0	Aug. 1881

FOREIGN DIVIDEND MINES.

Shares	Company	Paid	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.
35500	Alamillos, *l*, Spain*†	2 0 0	1¾	1¼ 1¾	2 4 0	0 1 3	Sept. 1881
130000	Almada and Tirito Consol., *s**†	1 0 0	⅜	⅛ ⅜	0 6 3	0 1 0	May 1876
20000	Australian, *c*, South Australia†	7 7 6	1¾	1¼ 1¾	1 5 6	0 2 0	Aug. 1881
15000	Birdseye Creek, *g*, California*	4 0 0	2	1⅞ 2	0 18 0	0 2 0	June 1881
20000	Cape Copper Mining,*† South Africa	7 0 0	46	45 47	43 7 6	1 0 0	Sept. 1881
35000	Cesena Sulph. Co., Romagna, Italy*	10 0 0	—		1 1 0	0 1 0	Aug. 1879
50000	Copiapo, *c*, Chili* (£4 shares)	3 8 0	3	3⅛ 3⅜	1 13 9	0 1 0	May 1881
70000	English & Australian,*† *c*, S. Aust.	2 10 0	1¼	1 1¼	2 18 9	0 1 0	Mar. 1880
25000	Fortuna, *l*, Spain*†	2 0 0	4½	4¼ 4¾	7 19 2	0 2 0	Sept. 1881
60000	Frontino & Bolivia, *g*, New Gran.*†	2 0 0	4	3 3½	0 8 0	0 2 0	Jan. 1881
200000	La Plata, *s-l*, Leadville†	2 0 0	1½	1⅛ 1⅜	0 7 5	0 0 4	Aug. 1881
15000	Linares, *l*, Spain*†	3 0 0	6	5½ 6	18 17 10	0 3 0	Sept. 1881
66000	New Quebrada, *c*, Venezuela†	5 0 0	4½	4¼ 4¾	0 5 6	0 3 0	July 1881
1000	Ditto, Debentures	100 0 0	98	97 98	6 per cent.		
3000	Oregon, *g*, Oregon, U.S. (pref. sh.)	4 0 0	—		0 2 6	0 2 6	Dec. 1880
50000	Panulcillo, *c*, Chili*†	4 0 0	5¼	4¾ 5¼	0 13 3	0 4 0	Apr. 1881
25000	Pitangui,* *g*, Brazil (in. 6000 £1 pd).	0 10 0	—		0 1 0	0 1 0	Sept. 1880
10000	Pontgibaud, *s-l*, France†	20 0 0	16	14 16	23 17 6	0 7 3	Dec. 1880
100000	Port Phillip, *g*, Clunes*† (£2 shares)	1 0 0	½	¼ ½	1 14 2	0 0 10	Feb. 1881
54000	Richmond Consol., *s*, Nevada*†	5 0 0	16¼	15¾ 16¼	12 11 6	0 10 0	Aug. 1881
1858880	Rio Tinto,* *c*, Sp.Coup.Bds., Huelva.	100 0 0	101	99 101	5 per cent.		July 1880
225000	Ditto, shares	10 0 0	22	22 23	0 18 0	0 8 0	Nov. 1880
40000	Santa Barbara,* *g*, Brazil	0 10 0	2	1¾ 2	0 11 9	0 1 0	June 1880
120000	Scottish-Australian Mining Co.*†	1 0 0	1¾	1¼ 1¾	10 p. cent.		Apr. 1881
80000	Ditto, New	0 10 0	⅞	⅝ ⅞	10 p. cent.		Apr. 1881
56000	Sentein,* *s-l*, *bl*, Ariège, France	1 0 0	1	¾ 1	0 2 0	0 2 0	Jan. 1880
22500	Sierra Buttes, *g*, California*†	2 0 0	1⅝	1¼ 1½	2 2 6	0 1 0	Apr. 1881
40625	Ditto, Plumas Eureka	2 0 0	2¾	2⅜ 2⅝	2 13 0	0 3 0	Apr. 1881
100000	So. Indian,* *g*, Madras (fully pd.)†	1 0 0	1⅞	1⅝ 1⅞	0 4 0	0 4 0	Aug. 1881
253000	St. John del Rey*† (£5 Stock and multiples dealt in)			195 205	5 p.c. for half-year,		Dec. 1880
92566	Tharsis,* *c*, *sul*, Spain (31000s. 7*l*.p.)†	10 0 0	43½	42½ 43½	6 10 0	2 10 0	June 1881
20000	Tolima,* *g*, *s*, Colombia	5 0 0	—		1 16 6	0 4 9	Apr. 1881
25000	Victoria* (London), *g*, Australia	1 0 0	—		0 13 10	0 0 8	Feb. 1881
15000	Western Andes, *s*, Colombia	5 0 0	—		2 18 0	0 2 6	Aug. 1880
2100	W. Prussian (5500 pref. sh. £10 pd.)	10 0 0	10½	10 10½	4 2 0	0 8 0	Apr. 1881

§ Have made calls since last dividend was paid.

NON-DIVIDEND BRITISH MINES.

Shares	Company	Paid	Last wk.	Clos pr.
30000	Alston United,* *l*, Cumberland	1 0 0	—	1 1⅛
12000	Assheton, *l*, Carnarvonshire*	5 0 0	¾	½ ¾
10000	Atlantic,* *c*, *l* (res. shares 28,000)	1 0 0	1⅜	1¼ 1⅜
36000	Basset & Buller Cons.,* *c*. *t*, Illogan.	1 0 0	—	
11583	Bedford Unit.,* *c*, Tavis.(£1 liab.)	0 8 0	2⅛	1⅞ 2⅛
8000	Blaen Caelan,* *l*, Cardigan	3 0 0	—	
30000	Blackburnbanks & Gildersdale, *l*	0 5 0	—	⅜ ½
30000	Bodidris,* *l*, *bl*, Denbighshire	1 0 0	1	¾ ⅞
30000	British,* *s-l*, *bl*, Wrexham	1 0 0	1⅛	1 1⅛
20000	Bwlch United,* *l*, Cardigan	0 17 6	3½	3 3½
25000	Callington Consols*, *t*	2 0 0	2¼	2 2¼
50000	Cambrian,* *s-l*, *c*, Cardiganshire	2 0 0	—	
6000	Carn Camborne, *t*, *c*, Camborne	0 8 0	3½	3 3½
20000	Carnarvon,* *c*, Carnarvonshire	1 0 0	1⅛	⅞ 1⅛
6000	Cathedral Cons., *c*, *t*, Gwennap	0 10 0	—	
25000	Coed-y-Fedw&Pant-y-Buarth,* *l*	1 0 0	1¼	1 1¼
2450	Cook's Kitchen, *t*, Illogan†	30 14 9	20½	24½ 25
15500	Court Grange United*, *s-l*	1 0 0	—	
6400	Crook Burn,* *l*, Cumberland	0 12 6	⅛	⅛
14000	Crosswood Mining Lands, *l**	1 0 0	1¼	¾ 1¼
45000	D'Eresby Mountain, *l*, *bl*, Llanrwst.	0 10 0	2½	2 2½
20000	Denbighshire Consolidated,* *l*	3 0 0	2	2 3
12000	Derwent,* *l*, Durham	4 0 0	1¾	1¼ 1¾
1000000	Devon,* *c*, *bl*, Tavistk. (151652 iss.)	0 1 0	—	
60000	Devon Friendship,* *c*, *ars*, Tavistock	1 0 0	1⅛	⅞ 1⅛
12000	Devon Great United* (2*l*. shares)	1 0 0	1⅝	1⅜ 1⅝
20000	Devonshire,* *s-l*, Lydford	1 0 0	—	
50000	Drakewalls,* *t*, *c* Calstock	1 0 0	⅝	½ ⅝
10000	Dubby Syke, *l*, Durham*	1 0 6	3s.	3s.
12000	East Blue Hills, *t*, St. Agnes	0 5 0	⅝	½ ¾
6000	East Botallack, *t*, St. Just	0 8 0	1¼	1¼ 1¼
6144	East Caradon, *c*, St. Cleer‡	3 19 6	½	¼ ½
4000	East Chiverton, *l*, Perranzabuloe	10 4 9	2	1½ 2
30000	E. Craven Moor,* *l*. Pateley Bridge	1 0 0	⅞	⅝ ⅞
12000	East Crebor, *c*, Tavistock	0 11 6	¼	⅛ ¼
15000	East Devon Cons.,* *c*, Buckfastigh.	2 0 0	—	3 3½
30000	East Herodsfoot, *s-l*, Liskeard	1 0 0	1⅛	1 1⅛
20000	East Long Rake,* *l*, Wales	1 0 0	1¼	1⅛ 1¼
21000	East Roman Gravels,* *l*, Salop	0 15 0	1	¾ 1
18000	East Van, *l*, Llanidloes*	5 0 0	1½	1 1½
4096	East Wheal Buller, *t*, *c*, Gwennap	0 10 0	—	
2096	East Wheal Lovell, *t*, Helston	15 3 6	1½	2 2½
100000	East Wheal Rose,* *s-l*, Newlyn East	0 10 0	—	
10000	Fortescue (Stannagwyn,)* *var*	1 0 0	—	
12000	Gawton,* *c*, Tavistock (2*l*. shares)	1 16 0	⅞	⅝ ⅞
14000	Glenroy,* *s-l*, Isle of Man	4 0 0	⅝	⅜ ⅝
30000	Gobbett,* *t*, Dartmoor	1 0 0	1¼	1⅛ 1¼
10000	Goddards,* *l*, *b*, Carnarvon	1 0 0	1¼	1 1¼
25000	Goodevere, *t*, St. Cleer	1 0 0	1¼	1⅛ 1¼
20000	Griffin,* *s-l*, Carnarvon	1 0 0	—	
20000	Great Dyliffe* (10000 sh. issued)	1 0 0	1⅛	⅞ 1⅛
12000	Great Holway,* *l*, Flintshire	5 0 0	5½	5 5½
100000	Great Polgooth United,* *t*	1 0 0	1⅛	¾ 1
6000	Great West Chiverton, *l*, St. Agnes.	0 5 0	⅜	¼ ⅜
10000	Gwern-y-Mynydd,* *s-l*, Flint(pref.)	4 0 0	1½	1¼ 1½
70000	Gwydyr Amal.* *l*, *bl*, Carnarvon	1 0 0	⅝	½ ⅝
12000	Herodsfoot, *l*, near Liskeard†	0 10 9	¾	½ ¾
13000	Hingston Down, *c*, Calstock*†	0 12 0	1⅛	1⅛ 1¼
20000	Kirkmichael,* *l* (2000 unissued)	1 0 0	1¼	1 1⅛
6000	Killifreth, *t*, Chacewater	4 0 0	2¼	1¾ 2¼
25000	Kit Hill Gt. Cons.* *c*, *ars-m*, (2*l*. sh.)	0 15 0	¾	½ ¾
15000	Lady Ann,* *s-l*, Llanarmon	1 0 0	1⅛	⅞ 1⅛
30000	Lady Ashburton,* *s*, Callington	1 0 0	1⅝	1⅜ 1⅝
15000	Lady Bertha,* *c*, Tavistock	1 0 0	—	
2500	Levant, *c*, *t*, St. Just	11 10 0	1⅝	1½ 1⅝
15000	Llandegla,* *l*, Wales	1 0 0	1⅛	⅞ 1⅛
10000	Lomax,* *s-l*, Helston	1 0 0	1¼	1 1¼
5120	Lovell, *t*, Wendron	0 16 0	1½	1¼ 1½
9000	Marke Valley, *c*, Linkinhorne‡	6 4 6	1¼	1 1¼
6000	Medlyn Moor, *t*, Wendron	3 15 10	—	
28000	Mid-Devon,* *c* (& 17000, 3s. 4d. pd.)	0 6 8	—	
20000	Mona Consols,* *c*, Anglesea	1 0 0	1¼	1 1¼
15000	Monkstown,* *man*, Devon	2 0 0	2⅝	2⅜ 2⅝
20000	Mostyn Consols,* *s-l*, Flint	1 0 0	—	
10000	Mynydd Gorddu, *l*, Cardigan*	4 0 0	4	3½ 4
25000	Moray Firth (18000 issned)	2 0 0	—	
12000	Morfa Du, *z*, *g*, *s*, Anglesea*	1 0 0	1	⅝ ⅞
80000	Mounts Bay,* *c*, *t*, Breage	0 10 0	⅜	⅛ ⅜
6144	Mount Carbis, *t*, *c*, Redruth	1 0 0	3⅜	3¼ 3½
2400	New Cook's Kitchen, *t*, Illogan	8 1 0	7	6¼ 6¾
8000	New Dolcoath, *t*, *c*, Camborne*	3 0 0	—	
10000	New Holmbush,* *t*, *c*, Callington	2 0 0	—	
6000	New Kitty, *t*, St. Agnes	0 10 0	2½	2⅛ 3
12000	New Penrose,* *t*, *c*, Helston	1 0 0	1¼	1⅛ 1¼
3500	New Tincroft,* *t*, Lelant	6 0 0	½	¼ ½
2000	New Trumpet, *t*, Wendron	0 10 0	1¼	1 1¼
12000	New West Caradon, *c*, Liskeard	0 1 9	¾	½ ⅝
3000	New Wheal Peevor, *t*, Redruth	0 10 0	2¼	1¾ 2¼
35000	New Wye Valley, *l*, Montgomery.*	1 0 0	1¼	¾ 1¼

NON-DIVIDEND MINES—*continued.*

Shares	Company	Paid	Last wk.	Clos pr.
20000	North Alfred, *c*, Phillack	0 10 0	1⅜	1⅛ 1⅜
5323	North Busy, *t*, *c*, Blackwater	0 10 8	½	¼ ½
10000	N. D'Eresby Mount.,* *l*, *bl*, Carnarv.	1 0 0	1¼	1 1¼
12000	North Herodsfoot, *l*, Liskeard	0 8 6	⅝	½ ⅝
50000	North Molton,* *c*, *mn*, *i*, Devon	1 0 0	—	
6000	North Penstruthal, *t*, *c*, Gwennap	1 14 6	1	¾ 1
2936	North Treskerby, *c*, St. Agnes	8 17 10	—	
8000	Northern,* *l*, Durham	1 0 0	1⅜	1⅛ 1⅜
40000	Okel Tor,* *t*, *c*, *a*, Calstock	1 0 0	1½	1 1½
80000	Old Shepherds *s-l*, Cornwall	0 10 0	—	
12000	Pandora,* *l*, Carnarvon	2 0 0	⅞	½ ¾
11612	Pant-y-Mwyn,* *l*, Mold	2 0 0	2⅛	1⅞ 2⅛
45000	Parys Corporation,* *c*, Anglesea	1 0 0	1	¾ ⅞
7500	Pateley Bridge, *l*, Yorkshire	1 0 0	—	
6000	Pedn-an-drea, *t*, Redruth	2 7 0	4¼	4¼ 4½
12000	Pelyn Wood, *c*, Lanivery	0 5 0	⅜	¼ ⅜
600	Pendarves United, *c*, Camborne	8 0 0	2½	2 2½
30000	Penhale and Barton, *t*, St. Columb	1 0 0	1⅛	1 1⅛
12000	Pen-yr-Orsedd,* *l*, Flintshire	1 0 0	1½	1 1½
15000	Perran Consols,* *s-l*	1 0 0	1¼	1 1¼
100000	Pioneer,* *var*. Wales	1 0 0	—	
10000	Polrose, *t*, Cornwall	0 13 6	⅝	⅜ ⅝
10000	Port Nigel,* *s-l*, Carnarvonshire	2 0 0	2	1½ 2
6000	Prince Royal, *t*, *c*, *s-l*, St. Agnes	1 0 6	1½	1¼ 1⅛
12000	Prince of Wales, *c*, *s*, Calstock	0 11 6	⅞	⅝ ⅞
15000	Royalton, *t*, St. Columb	1 0 0	1⅛	1 1¼
36000	Russell United,* *c*, Tavistock	0 15 0	⅞	⅝ ⅞
30000	Silver Hill,* Callington	0 10 0	⅝	½ ⅝
40000	Sortridge,* *c*, Horrabridge	1 0 0	1¼	1 1¼
50000	So. Cambrian,* *l*, Cardiganshire	1 0 0	1¾	1½ 1¾
30000	South d'Eresby Mountain,* *l*	1 0 0	—	
35000	So. Devon Unit.,* *c*, Buckfastleigh.	1 0 0	1¼	1¾ 2
6000	South Penstruthal, *t*, *c*, Gwennap	1 12 6	½	⅜ ½
6000	South Roskear, *t*, *c*, Camborne	8 5 0	—	
6000	South Tolcarne, *t*, *c*, Camborne	4 6 6	1⅞	2 2¼
40000	South Wheal Crebor*, *c*, Tavistock	1 0 0	1	⅞ 1⅛
2043	South Wheal Crofty, *c*, Illogan	19 7 0	8¼	12 12½
40000	Tamar, *s-l*, Bearalston*	1 0 0	1¾	1½ 1¾
6400	Teesdale,* Durham (pref.)	1 0 0	¼	¼
20000	Tin Hill,* St. Stephens	1 0 0	1⅝	1⅜ 1⅝
10000	Temple,* *l*, Cardigan	1 0 0	—	
12000	Trevince Consols, *t*, *c*, Gwennap	0 5 0	1¼	1 1¼
6000	Trugo, *c*, St. Columb	0 8 0	1½	1¼ 1½
10000	Tyn-y-Fron,* *l*, Cardiganshire	1 0 0	1¼	1 1¼
35000	Un. Van & Glyn,* *l*, (& 17500 pref. sh)	1 0 0	⅜	¼ ⅜
1000	Vaughan,* *l*, Cardiganshire	10 0 0	—	
18000	Victor,* *l*, Cilcen, Flintshire	0 14 0	½	¼ ½
15000	Vincent,* *t*, Altarnum	1 0 0	1¼	1 1¼
20000	Walkham United,* *t*, *c*, Tavistock	1 0 0	1⅛	1 1⅛
12000	West Assheton, *l*, Carnarvon	1 0 0	2	1¾ 2
12000	West Caradon, *c*, St. Cleer	0 5 9	1½	1 1¼
3000	W. Craven Moor, *l*, Pateley Brdge*	10 0 0	—	
12000	West Crebor, *c*, Tavistock	0 5 0	½	⅜ ⅝
10240	West Devon Consols, *c*, Calstock	1 0 0	1⅛	1 1½
10000	West Godolphin, *t*, *c*, Breage	0 15 0	2	1½ 2
12000	West Holway,* *l*, Flintshire	1 0 0	2	1¾ 2
6000	West Kitty, *t*, St. Agnes	0 12 0	10¾	9½ 10
20000	W. Lisburne,* *l*, (1*l*. sh.) Cardigan	1 0 0	1⅜	1½ 1¾
3000	West Mary Ann, *l*, Menheniot	1 13 0	1⅛	1 1½
20000	W. Pateley Bridge, *l*, Yorkshire	1 0 0	1¼	¾ 1¼
12000	West Phœnix, *t*, *c*, Linkinhorne	0 12 8	1⅛	1 1⅛
6000	West Polbreen,* *t*, *c*, St. Agnes	0 2 0	1¼	1⅛ 1⅜
5190	West Poldice, St. Day‡	5 10 0	6¼	6 6½
10000	West Vor,* *t*, Helston	2 0 0	2	1½ 2
2048	West Wheal Frances, *t*, Illogan‡	30 1 3	12¼	19 20
3000	West Wheal Peevor, *t*, Redruth	3 0 6	15	13½ 14
12000	West Wye Valley,* *l*, Montgomery.	3 0 0	—	
6000	Wheal Agar, *c*, Illogan‡	14 6 0	15	14½ 15
6144	Wheal Basset, *c*, Illogan‡	6 1 0	5	5 5½
3000	Wheal Boys, *t*, Redruth	0 16 0	2½	2 2½
12000	Wheal Coates United,* *t*, St. Agnes	0 17 6	1⅞	1⅝ 1⅞
2585	W.Comf., & No. Tres., *t*, *c*, Gwennap	2 2 0	2½	2 2½
50000	Wheal Elizabeth,* *t*, Cornwall	1 0 0	⅞	⅝ ⅞
5000	W. Fortune,* *s*, *c*, *ars*, Harrowbarrow	1 0 0	—	2 2¼
15000	Wheal George,* *l*, *bl*, Carnarvon	1 0 0	1⅞	1¾ 2¼
12288	Wheal Jane, *t*, Kea‡	1 10 8	¾	½ ¾
12000	Wheal Jewell, *c*, St. Hilary	0 16 6	½	⅜ ½
25000	Wh. Hony and Trelawny, *s-l*, Lisk.	2 0 0	2¼	2 2¼
12000	Wheal Lusky, *t*, Callington	0 0 7	—	
2000	Wheal Owles, *t*, St. Just‡	7 3 0	—	
6000	Wh. Prussia, & Cardrew, *t*, *c*, Rdrth	2 0 0	1⅝	1⅞ 2¼
6000	Wheal Sisters, *t*, Lelant	3 5 0	2½	2 2½
4096	Wheal Uny, *t*, *c*, Redruth	15 16 0	2	2¼ 2½
14000	Ystwith,* *l*, Cardigan	1 0 0	1¼	¾ 1¼

bl, blende; *c*, copper; *g*, gold; *l*, lead; *s*, silver; *sl*, slate; *s-l*, silver-lead; *t*, tin; *z*, zinc; *i*, iron; *a*, arsenic.
* Limited Liability Companies; † quoted on the Stock Exchange; ‡ have paid dividends.

NON-DIVIDEND FOREIGN MINES; FOREIGN AND MISCELLANEOUS STOCKS; TRAMWAYS; INSURANCE COMPANIES; GAS, IRON AND COAL, WAGON COMPANIES, &c.

NON-DIVIDEND FOREIGN MINES.

Shares	Company	Paid	Clos. pr.
67000	Akankoo,* *g*, Gold Coast	0 5 0	¼ ⅜
64880	Anglo-African,* *d*, Kimberley,†	2 0 0	2 2½
12000	Arendal, *c*, Norway	4 0 0	2⅞ 3½
120000	Asia Minor,* *s-l*, Lidjessy, Sivas	0 7 6	⅜ ½
30000	Blue Tent, *hyd*, California	5 0 0	2 2¼
30000	Bratsberg,* *c*, Norway	2 0 0	2¼ 2½
40000	Brazilian, *g*,* Brazil	1 0 0	1 1¼
200000	British Australian,* *g*, N. So. Wales	1 0 0	
10000	Buena Ventura,* *l*, Spain (fy.pd)	2 0 0	
130000	California,* *g*, Colorado	1 0 0	1⅛ 1¼
130000	Callao Bis,* *g*, Venezuela	1 0 0	
15000	Canada,* *g*	1 0 0	
82500	Canadian, *c*, *sul*,* Canada†	4 0 0	1½ 1¾
23000	Central Jagersfontein Diamond*	5 0 0	2 3
100000	Cherambadi (Wynaad) District,* *g*.	1 0 0	
500000	Chile,* *g*, Venezuela	1 0 0	
106505	Chontales, *g*, *s*, Nicar.*† (98000 iss)	1 0 0	1/16 3/16
150000	Colar,* *g*, Mysore	0 10 0	½ ⅝
75000	Colombian Hydraulic, *g*, Colombia	1 0 0	
65000	Colorado United, *s-l* Colorado*†‡	5 0 0	2 2¼
100000	Cootacovil,* *g*, Wynaad	1 0 0	
120000	Devala Central,* *g*, Wynaad	1 0 0	¾ 1
200000	Devala Moyar,* *g*, Wynaad†	1 0 0	1⅜ 1⅝
75000	Devala Provident,* *g*, Wynaad†	0 10 0	1/16 3/16
50000	Dieu Donné,* *g*, Surinam	0 12 6	
100000	Dingley Dell,* *g*, Devala, India	1 0 0	
100000	Don Pedro North del Rey*	1 0 0	⅜ ⅝
205168	Eberhardt, *s*, Nevada*†	1 0 0	½ ¾
20000	English Australian, *g*, Victoria*	1 0 0	1 1¼
65000	Eureka,* *s*, Nevada	1 0 0	
100000	Exchequer, *g*, *s*, California*†	1 0 0	1/16 3/16
160000	Flagstaff District,* *s.g.* Utah	1 0 0	
65000	Gold Coast,* *g*, Wassau	1 0 0	
140000	Gold Hill,* *g*, North Carolina	1 0 0	1 1¼
250000	Gold Mining Assn. of Canada*	1 0 0	
75000	Great Southern Mysore,* *g*	1 0 0	⅜ ⅞
120000	Hoover Hill,* *g*, North Carolina	1 0 0	¾ 1
10000	Hornachos,* *s-l*, Spain	10 0 0	10 10½
12000	Hultafall,* *l*, *bl*, Orebro, Sweden	5 0 0	
150000	Indian Consolidated,* *g*	1 0 0	⅞ 1⅛
100000	Ind. Glenrock,* *g*, Wynaad†	1 0 0	1½ 1¾
150000	Indian Mammoth,* *g*, Chulimulla.	0 5 0	
150000	Indian Phœnix,* *g*, Wynaad†	1 0 0	1⅛ 1⅜
150000	Indian Trevelyan,* *g*, Wynaad	1 0 0	1⅛ 1⅜
100000	I.X.L., *g*, *s*, California*	1 0 0	1/16 3/16
50000	Javali, *g*, Nicaragua*	2 0 0	
50000	Kapanga,* *g*, New Zealand	1 0 0	⅜ ⅝
125000	Keystone,* *g*, North Carolina	1 0 0	
100000	La Concepcion,* *g*, Venezuela	1 0 0	
65000	London and California, *g**†‡	2 0 0	1/16 3/16
135000	Madras,* *g*, Mysore	1 0 0	
100000	Michipicoten,* *nat. c*, Quebec	1 0 0	1⅞ 1⅛
9000	Missouri, *l*, pref (fully paid)	10 0 0	10 10½
50000	Moselle,* *l*, *b-l*, Germany	1 0 0	
135000	Mysore,* *g*, India†	1 0 0	1⅝ 1⅞
120000	Mysore Reefs,* *g*, Madras	1 0 0	½ ¾
40000	Nava de Jadraque,* *g*, *s*, Spain	1 0 0	
125000	Needlerock,* *g*, Wynaad	1 0 0	
37000	N. Gold Run,* *hyd*, Cal. (& 23000 pref	1 0 0	
100000	Nine Reefs,* *g*, Kolar, Mysore	1 0 0	
75000	Norway,* *c*, Halsönön and Radön	1 0 0	
200000	Nouv. Monde, *g*, Ven. (en com.)†	0	⅜ ⅞
100000	Nundydroog,* *g*, Mysore	0 18 0	
150000	Olathe,* *s-l*, Leadville, Colorado	1 0	
125000	Ooregum,* *g*, Mysore	1 0	½ ¾
15000	Organos,* *g*, Colombia	1 0 0	
150000	Parcherry,* *g*, South-East Wynaad.	1 0 0	
80000	Pestarena United, *g*, Italy*†	3 0 0	5/16 7/16
100000	Pierre d'Or,* *g*, Spain	1 0 0	
80000	Pierrefitte* (20000 pref.)	1 0 0	
30000	Placerville, *g*, *q*, California	2 0 0	2⅛ 2⅜
50000	Potosi,* *g*, Venezuela†	1 0 0	¾ 1
300000	Providence,* *g*, *s*, California	1 0 0	
50000	Rara Fortuna,* *s*, Argent. Repub.	1 0 0	
40000	Ravenscliff, *g*, N. Zlnd; *c*, S. Aust.	0 15 0	
90000	Rhodes Reef,* *g*, Wynaad†	1 0 0	¾ 1
25000	Rico, *s*, Colorado (non.-assessable).	2 0 0	

NON-DIVIDEND FOREIGN MINES—*continued.*

Shares	Company	Paid	Clos. pr.
8600	Rio Grande do Sul* (and 31,000 pref.)	5 0 0	
100000	Rossa Grande, *g*, Brazil*† (£1 sh.).	1 0 0	⅛ ¼
25300	Ruby and Dunderberg, *g*, Nev.*†	10 0 0	3⅜ 3⅝
34022	San Pedro,* *c*, Chili	1 15 0	
120000	Santa Cruz,* *sul*, *c*, Ferrol, Spain	1 0 0	½ ¾
250000	Silver Peak,* *s*, Colorado	1 0 0	1⅛ 1⅜
200000	Souback & Catir Alan,* *s-l*, Turkey.	1 0 0	
100000	South-East Wynaad, *g*, India†	1 0 0	1¼ 1½
160000	Tambracherry,* *g*, Wynaad	1 0 0	1⅛ 1⅜
150000	Taunus,* *s-l*, *c*, Germany	1 0 0	
43174	United Mexican,*†‡ *s*, Mexico	29 7 9	1½ 2
100000	Victorine (Nevada, U.S.) Deb. Bds.	1 0 0	
50000	Virneberg, *c*, Rheinbreitb., Ger.*	2 0 0	
120000	Wentworth,* *g*, Wynaad	1 0 0	
100000	West Frntno & Boliv.,* *g*, Colombia	1 0 0	
100000	Wynaad District,* *g*, India	1 0 0	
80000	Wynaad Perseverance,*† *g*	1 0 0	⅞ 1⅛
75000	Yorke Peninsula, *c*, So. Australia†	1 0 0	3/16 5/16
54800	Yorke Pen., *c*, South Aust. Pref.†	1 0 0	⅝ ⅞
140000	Yuba River,* *g*, *hyd*, California	1 0 0	1 1⅛

INSURANCE COMPANIES.

Issue	Shares	Company	Pd.	Clos. pr.
50000	100	Alliance British and Foreign	11	37 39
10000	100	Ditto, Marine	20	28 30
50000	20	British and Foreign Marine [L].	4	21½ 22¼
550000	50	Commercial Union	5	25 26
50000	50	Eagle	5	6½ 7
5000	20	Globe Marine [L]	11	
27500	100	Imperial Life	10	23 25
13453	100	Indemnity Marine	50	113 118
100000	10	Lion Fire [L]	2	2 2½
49626	20	L'pool & Lond. Globe (£1 annty)	2	22 24
35862	25	London	12½	65 67
40000	25	London and Lancashire Fire	2½	5½ 6
50000	20	London and Provincial Marine	2	5¼ 5¾
10000	100	Marine	18	25 27
50000	10	Merchants' Marine	2	1 1½
50000	10	Maritime	2	7¼ 7¾
40000	50	North British and Mercantile	8¾	66 68
30000	100	Northern	5	46½ 47½p
40000	25	Ocean Marine	5	8½ 9
	—	Phœnix Fire	—	
200000	10	Queen	1	3¾ 4¼
100000	10	Railway Passengers	29s.	7½ 8
200000	5	Rock Life	½	8¼ 8¾
50000	10	Sea	2	3¼ 3 1/16 p
135000	20	Lancashire	2	8 8½
4000	20	Standard Marine	4	2¾ 3 p
10000	20	Thames and Mersey Marine [L].	2	12¾ 13¼
40640	20	Union Marine, Liverpool [L]	3½	5¾ 6¼
50000	20	Universal Marine [L]	3	8½ 9

MISCELLANEOUS

Shares	Company	Paid	Price
25	Australian Agricultural	21 10	65 67
10	Brighton Aquarium [L]	10 0	4 5
25	City of London Real Property	12 0	15¾ 16¼
16	Fore Street Warehouse [L]	14 0	17 18
15	Foster, Porter, and Co. [L]	10 10	15½ 16½
7½	Imperial Credit [L]	7 10	—
10	Milner's Safe [L]	10 0	9½ 10
25	National Discount [L]	5 0	11 11½
10	Pawson and Co. [L]	6 0	5½ 6
50	Peninsular and Oriental Steam	50 0	57 59
Stk.	Scottish Australian Invt. Co.	100 0	207 212
Stk.	Ditto New Ordinary	50 0	102 107
Stk.	Ditto 6 per c. guar. pref.	100 0	129 134
Stk.	Ditto 5 per c. guar. pref.	100 0	112 117
12	Telegraph Const. & Maint. [L]	12 0	28¼ 28¾
5	Ditto, 2nd Bonus, 3 p.c. (retd. 2 10 0)		1⅛ 1¾
1	Zoedone [L]	1 0	1 1¼

IRON AND COAL COMPANIES

Shares	Company	Paid	Price
£100	Abbot, John, and Co [L]	£75 0	40 37½ dis
5	Alltami Colliery Co. [L]	5 0	1 1½
20	Ashbury Co. [L] (new)	6 10	6½ 6¾ dis
3	Bagnall, John, and Sons [L]	3 0	3/16 5/16
10	Benhar Coal Co. [L]	10 0	1¼ 1⅜
10	Bilbao Iron Co. [L]	10 0	5 5⅛
20	Bolckow, Vaughan, & Co. [L] A	12 0	3⅞ 4⅛ pm
50	Brown, Bailey, and Dixon [L]	40 0	24 22 dis
100	Brown, John, and Co. [L]	70 0	13¾ 13½ dis
3	Cakemore, Cseway. Grn. ord. sh.	3 0	—
3	Ditto (7½ per cent. pref.)	3 0	—
100	Cammell and Co. [L]	80 0	10⅝ 10⅜ dis
20	Cannock & Huntington Coal [L]	10 0	11 10½ dis
10	Central Swedish Iron & Stl. [L]	10 0	1 1½
50	Charlton Iron Co. [L]	50 0	3 3½
50	Chatterley Iron Co. [L]	50 0	5 6
10	Chillington Iron Co. [L]	10 0	2 2¼
10	Consett Iron Co. [L]	7 10	16½ 17 pm
1	Consett Spanish Ore [L]	1 0	½ ⅝ pm
20	Darlington Iron Co. [L]	18 10	18 17½ dis
50	Davy Brothers [L]	22 10	4 4¼ pm
23	Ebbw Vale Co. [L]	20 0	9½ 10
8	Genl. Mining Ass. [L] (ful.pd.)	80 0	4¼ 4¾
50	Knowles, Andrew, and Co. [L]	22 0	14¾ 14¼ dis
20	Llynvi and Tondu [L]	20 0	7 7½
10	Lydney & Wigpool Iron Ore [L]	9 5	9 8 dis
10	Marbella Iron Ore Co. [L]	10 0	7 7½
10	Midland Iron Co. [L]	5 0	1½ 2 pm
10	Monkland Iron & Coal Co. [L]	10 0	2 2½
4	Mwyndy Iron Ore [L]	3 15	1 1½
100	Nant-y-Glo & Blaina (8 p.c. prf.)	100 0	33½ 34
3	Nerbudda Coal and Iron [L]	2⅛	⅝ ⅞
10	Newport Abercarn Coal Co. [L]	10 0	7 7½
35	Palmer's Shipbldg. & Iron [L]	35 0	28 29
100	Parkgate Iron Co. [L]	65 0	1¼ 1 dis
20	Patent Nut and Bolt [L]	14 0	9¾ 10 pm
20	Pelsall Coal and Iron [L]	20 0	12½ 13
50	Rhymney Iron Co. [L]	50 0	25 27
10	Sandwell Park Colliery Co. [L]	10 0	15½ 16
100	Shotts Iron Co. [L]	100 0	55 60
25	Sheepbridge Iron and Coal [L]	20 0	6¼ 6 dis
50	Silkstone & Dodw. Cl. & Iron [L]	45 0	—
50	Somorrostro Iron Co. [L]	50 0	—
100	Staveley Iron and Coal Co. [L]	60 0	12¾ 13¼ pm
100	Ditto ditto B	10 0	1¾ 2 pm
5	Teesside Iron & Engine Works	5 0	1¾ 2
50	Tredegar Iron and Coal, A [L]	26 0	10 9 dis
25	Ditto ditto B	25 0	19½ 20
20	Ulverston Mining Co. [L]	16 0	
10	Vancouver Coal [L]	6 0	3 4
25	W. Cumberland Iron & Steel [L]	20 0	9¼ 9¾

BANKS.

Issue	Shares	Company	Pd.	Clos. pr.
100000	10	Agra [L]	all	10 10½
80000	20	Anglo-Egyptian Banking [L]	all	28 29
30000	40	Bank of Australasia	all	76 78
12500	20	Bank of British Columbia	all	18½ 19½
20600	50	Bank of British North America	all	55 57
10000	25	Bank of Egypt	all	27 29
50000	20	Bank of New South Wales	all	60 62
100000	10	Bank of New Zealand	all	24 25
25000	25	Bank of South Australia	all	41 42
20000	50	Bank of Victoria	25	35 37
40000	20	Chartrd. of Ind., Aust., & China.	all	24 25
30000	25	Ch. Merc. of Ind., Lond., China.	all	22 23
20000	100	Colonial	30	61 63
50000	20	English Bk. of Rio de Janeiro [L]	10	13 13½
60000	25	London and River Plate [L]	10	14 14½
50000	10	London and San Francisco [L]	all	6½ 7
50000	20	London Chartered of Australia	all	19½ 20½
100000	11	National Bank of N. Zealand [L]	3½	3¼ 3¾
60000	25	Oriental Bank Corporation	all	22 23
12500	10	Queensland National [L]	5	8¾ 9¼
34000	100	Stndrd. of British So. Africa [L].	25	60½ 61½
50000	25	Union of Australia	all	58½ 59½

GAS COMPANIES.

Issue	Shares	Company	Pd.	Clos. pr.
5000	20	Bahia [L]	all	17½ 18½
10000	5	Bombay [L]	all	5½ 6
10000	5	Ditto, New [L]	4	4½ 4¾
29700	Stk	Brentford Consolidated	100	155 160
14000	20	British	all	34 36
550000	Stk	Commercial	100	187 192
20000	20	Continental Union [L]	all	22 23
20000	20	Do. do. New, 1869, 1872	14	15 16
10000	20	Do. do. 7 per ct. Preference	all	24½ 25½
23406	10	European [L]	all	20 21
94850	Stk	Gaslight and Coke, A, Ord.	100	172 177
284200	Stk	Do, 4 per cent. Deb. Stock	100	104 106
5000	10	Hong Kong and China	all	15½ 16½
2800000	Stk	Imperial Continental	100	192 197
386500	Stk	London	100	186 191
12000	5	Malta & Mediterranean [L]	all	2 2¼
100000		Metrop. of Melbourne 6 p.c. Deb.		
25000	20	Monte Video [L]	all	14½ 15½
10000	5	Ottoman [L]	all	2¼ 2¾
30000	5	Oriental [L]	all	6¾ 7¼
27500	20	Rio de Janeiro [L]	all	26½ 27½
500000	Stk	South Metropolitan, A	100	207 212
50000	Stk	Ditto, ditto. B	100	177 182

TRAMWAYS.

Issue	Shares	Company	Pd.	Clos. pr.
40000	5	Anglo-Argentine [L]	all	4¾ 5
10000	10	Barcelona [L]	all	11½ 12½
7140	10	Belfast Street Tramways	all	5½ 6
3050	10	Birkenhead, Ordinary	all	4½ 5½
3000	10	Ditto, 6 per cent. Preference	all	10 11
9290	10	Bristol [L]	10	13½ 14
25000	10	Bordeaux Tram & Omnibus [L].	all	9½ 10
3200	10	Chester [L]	all	—
24000	10	Dublin	all	—
14690	10	Edinburgh Street Tramways	all	12½ 13
35000	10	Glasgow Tramway & Omni. [L]	9	13½ 14½
10000	10	Hughes Loco. and Tram. works.	all	¼ ¾
7500	10	Hull Street Tramways	all	9¼ 9¾
7500	10	Imperial [L]	all	2 3
34000	10	Liverpool Unit. Tram & Om. [L]	all	9¾ 10¼
25000	10	London [L]	all	13½ 14
15000	10	London Street Tramways	all	10¾ 11¼xd
60000	10	North Metropolitan	all	15¼ 15¾
8000	10	Nottingham and District [L]	all	8¾ 9¼
15947	10	Provincial [L]	all	10½ 11
6000	10	Sheffield	all	6 7
5000	10	Southampton	all	5½ 6½
6000	10	Sunderland [L]	all	4 5
10000	10	Swansea [L]	all	—
12000	10	Tramways of France [L]	all	6 6½
16500	10	Tramways of Germany [L]	all	10½ 11
20000	5	Tramways and Gen. Works [L].	all	6 6½
40000	5	Tramways Union [L]	all	6 6½
25000	10	Vale of Clyde	6	4½ 4¾
7200	10	Wolverhampton [L]	all	6½ 7½

TELEGRAPH COMPANIES

Shares	Company	Pd.	Clos. pr.
Stk.	Anglo-American	100 0	52 53
10	Brazilian Submarine	10 0	10¾ 11
10	Cuba	10 0	9½ 10
10	Direct Spanish	9 0	5 5½
20	Direct United States Cable	20 0	10½ 10¾
10	Eastern	10 0	10⅜ 10⅝
10	East. Exten. Austr. and China	10 0	10⅞ 11⅛
10	German Union	10 0	10 10½
10	Great Northern	10 0	12 12½
25	Indo-European	25 0	28 29
10	London Platino Brazilian	10 0	5⅜ 5⅝

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